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<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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<212> PRT

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<212> DNA

<213> Homo sapiens

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<210> 5850
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 5850
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 35 40 45
 Gly Pro Ile His Ile Ala Glu Gly Gly Arg Gly Arg Pro Pro Gly
 50 55 60
 Ser Ala Ser Asn Pro Gln Pro Pro Gly Ser Pro His Cys Pro Ser Ala
 65 70 75 80
 Gly Leu Ser Pro Val Pro Gly Val Gly Gly Arg Gln Cys Pro Gly Thr
 85 90 95
 Val Pro Arg Val Arg Arg Pro Gly Leu Ala Gly His Pro Val Thr His
 100 105 110
 Arg Ile Asn Arg Lys Thr Ala Ser Pro Pro Asn Leu Cys Pro Arg His
 115 120 125
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 Gln Arg Thr Leu Thr Pro Pro Arg Gly Ala
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<210> 5851
 <211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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360
tgctgccatg gttacatcct cagacgtttt attatcaact gtttccacag atgcattcct
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<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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          20          25          30
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
        35         40         45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
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Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
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Glu Met

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<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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120
tcaggcccag cagctccatg gaggacgccg gcgaggacce caccacgttt gctgcccact
180

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300
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487

<210> 5854
<211> 68
<212> PRT
<213> Homo sapiens

<400> 5854
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Tyr Arg Arg Ser Gln Glu Gly Gly Pro Ala Arg Pro Ala Ala Pro Asp
20 25 30
Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala
35 40 45
Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val
50 55 60
Ser Trp Pro Leu
65

<210> 5855
<211> 362
<212> DNA
<213> Homo sapiens

<400> 5855
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360
an
362

<210> 5856
<211> 113
<212> PRT

<213> Homo sapiens

<400> 5856

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Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
 20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
 65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
 85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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360
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420
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720
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840

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 1751

<210> 5858
 <211> 434
 <212> PRT
 <213> Homo sapiens

<400> 5858
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 20 25 30
 Gly Gly Gln Gly Arg Gly Gly Glu Lys Pro Pro His Leu Ala Ala Leu
 35 40 45
 Ile Leu Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys
 50 55 60
 His Leu Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu
 65 70 75 80
 Asp Ser Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu
 85 90 95
 Ile Glu Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser
 100 105 110
 Ser Glu Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu

115	120	125
Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala		
130	135	140
Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met		
145	150	155
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His		
165	170	175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu		
180	185	190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp		
195	200	205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu		
210	215	220
Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met		
225	230	235
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile		
245	250	255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu		
260	265	270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn		
275	280	285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp		
290	295	300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu		
305	310	315
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser		
325	330	335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala		
340	345	350
Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val		
355	360	365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val		
370	375	380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala		
385	390	395
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu		
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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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aaatcacaaac ctctcttttg attccccttc acgctaagcc tctttcaaatt tcttttctct
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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

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			20					25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
		35					40						45		
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
	50					55					60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
65					70					75				80	
Pro	Leu	Val	Gly	Asp	Trp	Gly	Ser	Val	Phe	Ser	His	Leu	Tyr	Leu	Leu
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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1951

<210> 5862
 <211> 514
 <212> PRT
 <213> Homo sapiens

<400> 5862

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Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
          35           40           45
Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
          50           55           60
Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
65          70          75          80
Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
          85          90          95
Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
          100          105          110
Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
          115          120          125
Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
          130          135          140
Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
145          150          155          160
Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
          165          170          175
Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
          180          185          190
Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
          195          200          205
Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
          210          215          220
Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
225          230          235          240
Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
          245          250          255
Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
          260          265          270
Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
          275          280          285
Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
          290          295          300
Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
305          310          315          320
Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
          325          330          335
Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
          340          345          350
Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
          355          360          365
Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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      370              375              380
Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp
385              390              395              400
Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp
      405              410              415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420              425              430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435              440              445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450              455              460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465              470              475              480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
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Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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<210> 5863
 <211> 438
 <212> DNA
 <213> Homo sapiens

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120
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180
ctggtagccg ggggagccca ggggtgaacac tgaggttcta ccctgttcta gtggttgctt
240
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300
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438

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<210> 5864
 <211> 104
 <212> PRT
 <213> Homo sapiens

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<400> 5864
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Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
20      25      30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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1229

<210> 5866
<211> 212
<212> PRT
<213> Homo sapiens

<400> 5866
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20 25 30
Arg Ala Gly Arg Thr Ala Arg Ala Asn Asn Pro Gly Ile Val Leu Thr
35 40 45
Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
50 55 60
Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
65 70 75 80
Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
85 90 95
Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
100 105 110
Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
115 120 125
Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
130 135 140
Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
145 150 155 160
Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
165 170 175
Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln
180 185 190
Asn Pro Leu Arg Ser Phe Lys His Lys Gly Lys Lys Phe Arg Pro Thr
195 200 205
Ala Lys Pro Ser
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<210> 5867
<211> 1882
<212> DNA
<213> Homo sapiens

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240

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360
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420
ctccaaagtt tccagcttcc tgaggcccta caaatagtaa ccctaggtc agagacccaa
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1882

<210> 5868

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5868

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			20					25					30		
Trp	Ile	Asn	Phe	Lys	Thr	Ser	Glu	Ala	Asn	Ser	Ala	Arg	Gly	Phe	Gln
		35					40					45			
Ile	Pro	Tyr	Val	Thr	Tyr	Asp	Glu	Asp	Tyr	Glu	Gln	Leu	Val	Glu	Asp
	50					55					60				
Ile	Val	Arg	Asp	Gly	Arg	Leu	Tyr	Ala	Ser	Glu	Asn	His	Gln	Glu	Ile
65					70					75				80	
Leu	Lys	Asp	Lys	Lys	Leu	Ile	Lys	Ala	Phe	Phe	Glu	Val	Leu	Ala	His
			85						90					95	
Pro	Gln	Asn	Tyr	Phe	Lys	Tyr	Thr	Glu	Lys	His	Lys	Glu	Met	Leu	Pro
		100						105					110		
Lys	Ser	Phe	Ile	Lys	Leu	Leu	Arg	Ser	Lys	Val	Ser	Ser	Phe	Leu	Arg
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Pro	Tyr	Lys													
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<210> 5869

<211> 910

<212> DNA

<213> Homo sapiens

<400> 5869

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<210> 5870
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 5870
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 Gly Ser Leu Leu Ile Met His His Glu Ala Ser Thr His Arg Val Ile
 35 40 45
 Pro Thr Leu Val Gln Thr Gly Leu His Gly Arg His Ile Leu Gly Arg
 50 55 60
 His Val Phe Gly Ser Ala Ala Asn Leu Phe Ser Cys Ala Ile Asp Gln
 65 70 75 80
 Val Phe Pro Asn Glu Gly Cys Leu Pro Tyr Ser Cys Gln Glu Pro Asn
 85 90 95
 Ser Ser Leu Gln Tyr Gln Ile Gln Ser Val Val Arg Met Lys Cys Gly
 100 105 110
 Gly Leu Val Thr Glu Glu Ala Val Glu Arg Arg Arg Ala Trp Val Ala
 115 120 125
 Pro

<210> 5871
 <211> 2217
 <212> DNA
 <213> Homo sapiens

<400> 5871
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 tagtcattca ggagcaagtt gttcagtttc catatagatt ctgtgtgttt tagtcttgct
 180
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<210> 5872

<211> 578

<212> PRT

<213> Homo sapiens

<400> 5872

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Glu	Ala	Ser	Pro	Val	Val	Val	Glu	Lys	Ser	Asn	Ser	Tyr	Pro	His	Gln
			20					25					30		
Leu	Tyr	Thr	Ser	Ser	Ser	His	His	Ser	His	Ser	Tyr	Ile	Gly	Leu	Pro
		35					40					45			
Tyr	Ala	Asp	His	Asn	Tyr	Gly	Ala	Arg	Pro	Pro	Pro	Thr	Pro	Pro	Ala
	50					55					60				
Ser	Pro	Pro	Pro	Ser	Val	Leu	Ile	Ser	Lys	Asn	Glu	Val	Gly	Ile	Phe
65					70					75				80	
Thr	Thr	Pro	Asn	Phe	Asp	Glu	Thr	Ser	Ser	Ala	Thr	Thr	Ile	Ser	Thr
			85						90					95	
Ser	Glu	Asp	Gly	Ser	Tyr	Gly	Thr	Asp	Val	Thr	Arg	Cys	Ile	Cys	Gly
			100					105					110		
Phe	Thr	His	Asp	Asp	Gly	Tyr	Met	Ile	Cys	Cys	Asp	Lys	Cys	Ser	Val
		115					120					125			
Trp	Gln	His	Ile	Asp	Cys	Met	Gly	Ile	Asp	Arg	Gln	His	Ile	Pro	Asp
	130					135					140				
Thr	Tyr	Leu	Cys	Glu	Arg	Cys	Gln	Pro	Arg	Asn	Leu	Asp	Lys	Glu	Arg
145					150					155				160	
Ala	Val	Leu	Leu	Gln	Arg	Arg	Lys	Arg	Glu	Asn	Met	Ser	Asp	Gly	Asp
				165					170					175	
Thr	Ser	Ala	Thr	Glu	Ser	Gly	Asp	Glu	Val	Pro	Val	Glu	Leu	Tyr	Thr
			180					185					190		
Ala	Phe	Gln	His	Thr	Pro	Thr	Ser	Ile	Thr	Leu	Thr	Ala	Ser	Arg	Val
		195					200					205			
Ser	Lys	Val	Asn	Asp	Lys	Arg	Arg	Lys	Lys	Ser	Gly	Glu	Lys	Glu	Gln
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His	Ile	Ser	Lys	Cys	Lys	Lys	Ala	Phe	Arg	Glu	Gly	Ser	Arg	Lys	Ser
225					230					235				240	
Ser	Arg	Val	Lys	Gly	Ser	Ala	Pro	Glu	Ile	Asp	Pro	Ser	Ser	Asp	Gly
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Ser	Asn	Phe	Gly	Trp	Glu	Thr	Lys	Ile	Lys	Ala	Trp	Met	Asp	Arg	Tyr
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Glu	Glu	Ala	Asn	Asn	Asn	Gln	Tyr	Ser	Glu	Gly	Val	Gln	Arg	Glu	Ala
		275				280						285			
Gln	Arg	Ile	Ala	Leu	Arg	Leu	Gly	Asn	Gly	Asn	Asp	Lys	Lys	Glu	Met

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 305 310 315 320
 Glu Ser His Ile Gln Lys Asn Lys Lys Ile Leu Lys Ser Ala Lys Asp
 325 330 335
 Leu Pro Pro Asp Ala Leu Ile Ile Glu Tyr Arg Gly Lys Phe Met Leu
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 Arg Glu Gln Phe Glu Ala Asn Gly Tyr Phe Phe Lys Arg Pro Tyr Pro
 355 360 365
 Phe Val Leu Phe Tyr Ser Lys Phe His Gly Leu Glu Met Cys Val Asp
 370 375 380
 Ala Arg Thr Phe Gly Asn Glu Ala Arg Phe Ile Arg Arg Ser Cys Thr
 385 390 395 400
 Pro Asn Ala Glu Val Arg His Glu Ile Gln Asp Gly Thr Ile His Leu
 405 410 415
 Tyr Ile Tyr Ser Ile His Ser Ile Pro Lys Gly Thr Glu Ile Thr Ile
 420 425 430
 Ala Phe Asp Phe Asp Tyr Gly Asn Cys Lys Tyr Lys Val Asp Cys Ala
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 Cys Leu Lys Glu Asn Pro Glu Cys Pro Val Leu Lys Arg Ser Ser Glu
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 Ser Met Glu Asn Ile Asn Ser Gly Tyr Glu Thr Arg Arg Lys Lys Gly
 465 470 475 480
 Lys Lys Asp Lys Asp Ile Ser Lys Glu Lys Asp Thr Gln Asn Gln Asn
 485 490 495
 Ile Thr Leu Asp Cys Glu Gly Thr Thr Asn Lys Met Lys Ser Pro Glu
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 Thr Lys Gln Arg Lys Leu Ser Pro Leu Arg Leu Ser Val Ser Asn Asn
 515 520 525
 Gln Glu Pro Asp Phe Ile Asp Asp Ile Glu Glu Lys Thr Pro Ile Ser
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 Asn Glu Val Glu Met Glu Ser Glu Glu Gln Ile Ala Glu Arg Lys Arg
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 565 570 575
 Ala Gly

<210> 5873

<211> 3463

<212> DNA

<213> Homo sapiens

<400> 5873

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 180
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 300

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360
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<210> 5877

<211> 683

<212> DNA

<213> Homo sapiens

<400> 5877

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<210> 5878
 <211> 227
 <212> PRT
 <213> Homo sapiens

<400> 5878
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 35 40 45
 Arg Leu Arg Gly Cys Arg Asn Leu Tyr Lys Lys Asp Leu Leu Gly His
 50 55 60
 Phe Gly Cys Val Asn Ala Ile Glu Phe Ser Asn Asn Gly Gly Gln Trp
 65 70 75 80
 Leu Val Ser Gly Gly Asp Asp Arg Arg Val Leu Leu Trp His Met Glu
 85 90 95
 Gln Ala Ile His Ser Arg Val Lys Pro Ile Gln Leu Lys Gly Glu His
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 His Ser Asn Ile Phe Cys Leu Ala Phe Asn Ser Gly Asn Thr Lys Val
 115 120 125
 Phe Ser Gly Gly Asn Asp Glu Gln Val Ile Leu His Asp Val Glu Ser
 130 135 140
 Ser Glu Thr Leu Asp Val Phe Ala His Glu Asp Ala Val Tyr Gly Leu
 145 150 155 160
 Ser Val Ser Pro Val Asn Asp Asn Ile Phe Ala Ser Ser Ser Asp Asp
 165 170 175
 Gly Arg Val Leu Ile Trp Asp Ile Arg Glu Ser Pro His Gly Glu Pro
 180 185 190
 Phe Cys Trp Ala Asn Tyr Pro Ser Ala Phe His Ser Val Met Phe Asn
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<210> 5879
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 <212> DNA
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<400> 5879

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<210> 5880
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 5880
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 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
 50 55 60
 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
 65 70 75 80
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
 85 90 95
 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
 100 105 110
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
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 Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
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 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
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<210> 5881
 <211> 327
 <212> DNA
 <213> Homo sapiens

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<210> 5882
 <211> 109
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<213> Homo sapiens

<400> 5882

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          35           40           45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
          50           55           60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
65           70           75           80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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Gly	Ala	Gly	Pro	Leu	Tyr	Ser	His	His	Leu	Pro	Thr	Ser	Pro	Leu	Gln
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Gln	Ile	Leu	Gln	Glu	Arg	Pro	Arg	Ile	Ser	Thr	Ser	Thr	Leu	Asp	Leu
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Gly	Lys	Leu	Gln	Ser	Leu	Pro	Glu	Gly	Ser	Leu	Gly	Arg	Glu	Tyr	Leu
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Arg	Phe	Leu	Asp	Val	Asn	Arg	Val	Ser	Pro	Asp	Thr	Arg	Ala	Pro	Thr
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Arg	Phe	Val	Asp	Asp	Glu	Glu	Leu	Ala	Tyr	Val	Ile	Gln	Arg	Tyr	Arg
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Glu	Val	His	Asp	Met	Leu	His	Thr	Leu	Leu	Gly	Met	Pro	Thr	Asn	Ile
			165						170					175	
Leu	Gly	Glu	Ile	Val	Val	Lys	Trp	Phe	Glu	Ala	Val	Gln	Thr	Gly	Leu

	180		185		190										
Pro	Met	Cys	Ile	Leu	Gly	Ala	Phe	Phe	Gly	Pro	Ile	Arg	Leu	Gly	Ala
	195						200					205			
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Asn	Gly	Arg	Arg	Ala	Pro	Cys	Val	Leu	Asn	Leu	Tyr	Tyr	Glu	Arg	Arg
	225				230					235				240	
Trp	Glu	Gln	Ser	Leu	Arg	Ala	Leu	Arg	Glu	Glu	Leu	Gly	Ile	Thr	Ala
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<210> 5888

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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		20						25					30		
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr
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Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly	Phe	Thr	Thr
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<211> 2198

<212> DNA

<213> Homo sapiens

<400> 5889

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<212> PRT

<213> Homo sapiens

<400> 5890

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<212> DNA

<213> Homo sapiens

<400> 5891

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<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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 Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys
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 Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe
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 Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
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 Ala Asp Ala Cys His Ala Glu Leu Leu Arg Thr Ile Ser Thr Thr Met
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 Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly
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 Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala
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 Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro
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 Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
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 Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
 195 200 205
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<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
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Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
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Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu		175
	180	185
Glu Leu Asp Thr Leu Phe Thr Thr Ala Gly Leu Glu Lys Val Gln Asn		190
	195	200
Leu Val Asp Arg Arg Leu Gln Val Asn Arg Gly Lys Gln Leu Thr Met		205
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<210> 5900

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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Ile	Pro	Thr	Ile	Ile	Arg	Asp	Glu	Glu	Leu	Lys	Thr	Arg	Gly	Phe	Gly
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Gly	Lys	Gly	Ile	Val	Tyr	Asp	Thr	Gly	Gly	Leu	Ser	Ile	Lys	Gly	Lys
			85					90					95		
Thr	Thr	Met	Pro	Gly	Met	Lys	Arg	Asp	Cys	Gly	Gly	Ala	Ala	Ala	Val
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Leu	Gly	Ala	Phe	Arg	Ala	Ala	Ile	Lys	Gln	Gly	Phe	Lys	Asp	Asn	Leu
			115				120					125			
His	Ala	Val	Phe	Cys	Leu	Ala	Glu	Asn	Ser	Val	Gly	Pro	Asn	Ala	Thr
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Tyr	Ala	Cys	Lys	Asp	Leu	Gly	Ala	Asp	Ile	Ile	Leu	Asp	Met	Ala	Thr
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Lys Cys Gly Asp Leu Val His Pro Leu Val Tyr Cys Pro Glu Leu His		
225	230	235
Phe Ser Glu Phe Thr Ser Ala Val Ala Asp Met Lys Asn Ser Val Ala		
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<210> 5901

<211> 984

<212> DNA

<213> Homo sapiens

<400> 5901

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<210> 5902

<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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 Glu Cys Leu Gln Arg Phe Ala Asp Ser Leu Gln Glu Val Val Asn Tyr
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 His Met Ile Leu Phe Asp Gln Ala Gln Arg Ser Val Arg Gln Gln Leu
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<211> 3734

<212> DNA

<213> Homo sapiens

<400> 5903

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<211> 308

<212> PRT

<213> Homo sapiens

<400> 5904

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Pro	Asp	Asp	Tyr	Phe	Leu	Leu	Arg	Trp	Leu	Arg	Ala	Arg	Ser	Phe	Asp
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<210> 5905

<211> 2280

<212> DNA

<213> Homo sapiens

<400> 5905

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Lys	Lys	Gln	Phe	Gln	Asp	Thr	Cys	Lys	Val	Gln	Thr	Lys	Gln	Tyr
				725					730					735
Ala	Leu	Lys	Asn	His	Gln	Leu	Glu	Val	Thr	Pro	Lys	Asn	Glu	His
			740					745					750	
Thr	Ile	Leu	Lys	Thr	Leu	Lys	Asp	Glu	Gln	Thr	Arg	Lys	Leu	Ala
		755					760					765		
Leu	Ala	Glu	Gln	Tyr	Glu	Gln	Ser	Ile	Asn	Glu	Met	Met	Ala	Ser
	770					775				780				
Ala	Leu	Arg	Leu	Asp	Glu	Ala	Gln	Glu	Ala	Glu	Cys	Gln	Ala	Leu
785					790					795				800
Leu	Gln	Leu	Gln	Gln	Glu	Met	Glu	Leu	Leu	Asn	Ala	Tyr	Gln	Ser
				805				810					815	
Ile	Lys	Met	Gln	Thr	Glu	Ala	Gln	His	Glu	Arg	Glu	Leu	Gln	Lys

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 Glu Gln Arg Val Ser Leu Arg Arg Ala His Leu Glu Gln Lys Ile Glu
 835 840 845
 Glu Glu Leu Ala Ala Leu Gln Lys Glu Arg Ser Glu Arg Ile Lys Asn
 850 855 860
 Leu Leu Glu Arg Gln Glu Arg Glu Ile Glu Thr Phe Asp Met Glu Ser
 865 870 875 880
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 885 890 895
 Asp Tyr Arg

<210> 5911
 <211> 645
 <212> DNA
 <213> Homo sapiens

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 240
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 480
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 540
 gaacacttta atattttcct tactgctaag gacctgaacg cctacaagaa gcaagggata
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 645

<210> 5912
 <211> 211
 <212> PRT
 <213> Homo sapiens

<400> 5912
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 Asp Leu Ile Leu Pro Asp Gly Gly Thr Pro Ala Gly Thr Ser Ser Pro
 35 40 45
 Ala Ser Ser Ser Ser Leu Leu Asn Arg Leu Gln Leu Asp Asp Asp Ile

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      50              55              60
Asp Gly Glu Thr Arg Asp Leu Phe Val Ile Val Asp Asp Pro Lys Lys
65              70              75              80
His Val Cys Thr Met Glu Thr Tyr Ile Thr Tyr Arg Ile Thr Thr Lys
      85              90              95
Ser Thr Arg Val Glu Phe Asp Leu Pro Glu Tyr Ser Val Arg Arg Arg
      100              105              110
Tyr Gln Asp Phe Asp Trp Leu Arg Ser Lys Leu Glu Glu Ser Gln Pro
      115              120              125
Thr His Leu Ile Pro Pro Leu Pro Glu Lys Phe Val Val Lys Gly Val
      130              135              140
Val Asp Arg Phe Ser Glu Glu Phe Val Glu Thr Arg Arg Lys Ala Leu
145              150              155              160
Asp Lys Phe Leu Lys Arg Ile Thr Asp His Pro Val Leu Ser Phe Asn
      165              170              175
Glu His Phe Asn Ile Phe Leu Thr Ala Lys Asp Leu Asn Ala Tyr Lys
      180              185              190
Lys Gln Gly Ile Ala Leu Leu Thr Arg Met Gly Glu Ser Val Lys His
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Val Thr Arg
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<210> 5913

<211> 2495

<212> DNA

<213> Homo sapiens

<400> 5913

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780

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1320
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1380
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<210> 5914

<211> 158

<212> PRT

<213> Homo sapiens

<400> 5914

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		20						25				30			
Arg	Ser	Phe	Ser	Ile	Leu	Arg	Leu	Trp	Phe	Ser	Ile	Leu	Phe	Leu	Thr
	35						40					45			
Gly	Gln	Gly	Phe	Asp	Arg	His	Leu	Phe	Ala	Leu	Arg	His	Leu	Ala	Ala
	50					55					60				
Ala	Xaa	Gly	Ile	Ile	Leu	Pro	Glu	Leu	Tyr	Leu	Asp	Pro	Ala	Tyr	Gly
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Gln	Ile	Asn	His	Asn	Val	Leu	Ser	Thr	Ser	Thr	Leu	Ser	Ser	Pro	Ala
			85						90					95	
Val	Asn	Xaa	Cys	Arg	Phe	Ala	Pro	Val	Val	Ser	Asp	Ala	Phe	Gly	Val
		100						105					110		
Gly	Tyr	Ala	Val	His	Asp	Asn	Trp	Ile	Gly	Cys	Asn	Val	Ser	Ser	Tyr
	115						120					125			
Pro	Gly	Arg	Asn	Ala	Arg	Glu	Phe	Leu	Gln	Cys	Val	Glu	Lys	Ala	Xaa
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<210> 5915

<211> 457

<212> DNA

<213> Homo sapiens

<400> 5915

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<210> 5916
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 5916
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 Tyr Val Asn Phe Val Asn Glu Val Phe His Gln Ala Phe Leu Leu Pro
 35 40 45
 Ser Cys Glu Ile Ala Val Thr Arg Lys Val Val Gln Val Tyr Arg Lys
 50 55 60
 Trp Ile Leu Gln Asp Lys Pro Val Phe Met Glu Glu Pro Asp Arg Lys
 65 70 75 80
 Asp Val Ala Gln Glu Asp Ala Glu Lys Leu Gly Phe Ser Glu Thr Asp
 85 90 95
 Ser Lys Glu Ala Ser Ser Glu Ser Ser Gly His Lys Arg Ser Ser Ser
 100 105 110
 Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val
 115 120 125
 Thr Glu Glu Glu Asn Thr Asn Val Lys Ala Gly Val Gln Ala Leu Leu
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<210> 5917
 <211> 3727
 <212> DNA
 <213> Homo sapiens

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<210> 5918

<211> 981

<212> PRT

<213> Homo sapiens

<400> 5918

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Pro Gly Pro Val Arg Arg Pro Met Arg Lys Ser Phe Ser Gln Pro Gly
      50           55           60
Leu Arg Ser Leu Ala Phe Arg Lys Glu Leu Gln Asp Gly Gly Leu Arg
      65           70           75           80
Ser Ser Gly Phe Phe Ser Ser Phe Glu Glu Ser Asp Ile Glu Asn His
      85           90           95
Leu Ile Ser Gly His Asn Ile Val Gln Pro Thr Asp Ile Glu Asn
      100          105          110
Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
      115          120          125
Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser
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Phe Cys Ser Gln Gly Ile Arg His Val Asp His Phe Gly Phe Ile Cys
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Arg Glu Ser Ser Gly Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe
      165          170          175
Gln Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys
      180          185          190
Gln Ala Phe Thr Val Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala
      195          200          205
Gln Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu
      210          215          220
Arg Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys
      225          230          235          240
His Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu
      245          250          255
Val Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile
      260          265          270
Ile Ser Phe Leu Arg Cys Leu Tyr Glu Glu Lys Gln Lys Glu His Ile
      275          280          285
His Ile Gly Glu Met Lys Gln Thr Ser Gln Met Ala Ala Glu Asn Ile
      290          295          300
Gly Ser Glu Leu Pro Pro Ser Ala Thr Arg Phe Arg Leu Asp Met Leu
      305          310          315          320
Lys Asn Lys Ala Lys Arg Ser Leu Thr Glu Ser Leu Glu Ser Ile Leu
      325          330          335
Ser Arg Gly Asn Lys Ala Arg Gly Leu Gln Glu His Ser Ile Ser Val
      340          345          350
Asp Leu Asp Ser Ser Leu Ser Ser Thr Leu Ser Asn Thr Ser Lys Glu
      355          360          365
Pro Ser Val Cys Glu Lys Glu Ala Leu Pro Ile Ser Glu Ser Ser Phe
      370          375          380
Lys Leu Leu Gly Ser Ser Glu Asp Leu Ser Ser Asp Ser Glu Ser His

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385 390 395 400
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 Arg Ala Asn Thr Leu Ser His Phe Pro Ile Glu Cys Gln Glu Pro Pro
 420 425 430
 Gln Pro Ala Arg Gly Ser Pro Gly Val Ser Gln Arg Lys Leu Met Arg
 435 440 445
 Tyr His Ser Val Ser Thr Glu Thr Pro His Glu Arg Lys Asp Phe Glu
 450 455 460
 Ser Lys Ala Asn His Leu Gly Asp Ser Gly Gly Thr Pro Val Lys Thr
 465 470 475 480
 Arg Arg His Ser Trp Arg Gln Gln Ile Phe Leu Arg Val Ala Thr Pro
 485 490 495
 Gln Lys Ala Cys Asp Ser Ser Ser Arg Tyr Glu Asp Tyr Ser Glu Leu
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 Gly Glu Leu Pro Pro Arg Ser Pro Leu Glu Pro Val Cys Glu Asp Gly
 515 520 525
 Pro Phe Gly Pro His Gln Arg Lys Arg Lys Gly His Leu Val Ser Ser
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 Glu Ser Cys Gly Lys Gly Leu Phe Phe Asn Arg Tyr Cys Xaa Leu Arg
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 Asn Lys Arg Leu Lys Leu Asp Tyr Glu Glu Ile Thr Pro Cys Leu Lys
 580 585 590
 Glu Val Thr Thr Val Trp Glu Lys Met Leu Ser Thr Pro Gly Arg Ser
 595 600 605
 Lys Ile Lys Phe Asp Met Glu Lys Met His Ser Ala Val Gly Gln Gly
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 Val Pro Arg His His Arg Gly Glu Ile Trp Lys Phe Leu Ala Glu Gln
 625 630 635 640
 Phe His Leu Lys His Gln Phe Pro Ser Lys Gln Gln Pro Lys Asp Val
 645 650 655
 Pro Tyr Lys Glu Leu Leu Lys Gln Leu Thr Ser Gln Gln His Ala Ile
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 Gln Leu Gly Ala Gly Gln Leu Ser Leu Tyr Asn Ile Leu Lys Ala Tyr
 690 695 700
 Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val
 705 710 715 720
 Ala Gly Ile Leu Leu Leu His Met Ser Glu Glu Glu Ala Phe Lys Met
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 740 745 750
 Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu
 755 760 765
 His Asp Tyr His Arg Asp Leu Tyr Asn His Leu Glu Glu His Glu Ile
 770 775 780
 Gly Pro Ser Leu Tyr Ala Ala Pro Trp Phe Leu Thr Met Phe Ala Ser
 785 790 795 800
 Gln Phe Pro Leu Gly Phe Val Ala Arg Val Phe Asp Met Ile Phe Leu
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 Gln Gly Thr Glu Val Ile Phe Lys Val Ala Leu Ser Leu Leu Gly Ser

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<212> DNA

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<400> 5919

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<212> PRT

<213> Homo sapiens

<400> 5922

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<212> PRT

<213> Homo sapiens

<400> .5924

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<211> 4538

<212> DNA

<213> Homo sapiens

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<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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 <211> 1786
 <212> DNA
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<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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Ile	His	Ser	Ile	Phe	Lys	Asn	Ala	Ile	Gln	Leu	Leu	Gln	Glu	Lys	Gly
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Leu	Val	Phe	Gln	Lys	Asp	Asp	Gly	Phe	Asp	Asn	Leu	Tyr	Tyr	Val	Thr
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Ile	Leu	Ala	Cys	Ala	Arg	Leu	Ser	Ile	Arg	Pro	Gly	Leu	Ser	Glu	Ala
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Val	Leu	Gln	Gln	Val	Leu	Glu	Leu	Leu	Glu	Asp	Gln	Ser	Asp	Ile	Val
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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
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<210> 5931
 <211> 478
 <212> DNA
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<400> 5932

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Glu	Arg	Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln
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Ala	Gly	Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln
	50					55				60					
Glu	Val	Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys
65					70					75					
Pro	Glu	Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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 210 215 220
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 Tyr Ile Ser Pro Ser Ser Arg Ala Arg Ile Thr Ala Val Cys Asn Phe
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<210> 5935

<211> 2727

<212> DNA

<213> Homo sapiens

<400> 5935

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<210> 5936
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 5936
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 35 40 45
 Tyr His Pro Thr Pro Ser Gln Thr Arg Leu Ala Thr Gln Leu Thr Glu
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 Glu Glu Gln Ile Arg Ile Ala Gln Arg Ile Gly Leu Ile Gln His Leu
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 Pro Lys Gly Val Tyr Asp Pro Gly Arg Asp Gly Ser Glu Lys Lys Ile
 85 90 95
 Arg Glu Cys Val Ile Cys Met Met Asp Phe Val Tyr Gly Asp Pro Ile
 100 105 110
 Arg Phe Leu Pro Cys Met His Ile Tyr His Leu Asp Cys Ile Asp Asp
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<210> 5937
 <211> 1536
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 <213> Homo sapiens

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
 35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
 50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
 65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
 85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
 100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
 115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
 130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
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Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
 165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
 180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
 195          200          205
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 210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
 225          230          235          240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
 245          250          255
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 260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
 275          280          285
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Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
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Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
 355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
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405

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 <211> 795
 <212> DNA
 <213> Homo sapiens

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<210> 5940
 <211> 96
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
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<210> 5941
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<212> DNA
<213> Homo sapiens

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<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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			20					25				30			
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<210> 5943
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 <212> DNA
 <213> Homo sapiens

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<210> 5944
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 <212> PRT
 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
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<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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Pro Ile Met Cys Ser Tyr Lys Leu	Val Thr Val Lys Phe Glu Val Trp	
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Gly Leu Gln Thr Arg Val Glu Gln	Phe Val His Lys Val Val Arg Asp	
245	250	255
Ile Leu Leu Ile Gly His Arg Gln	Ala Phe Ala Trp Val Asp Glu Trp	
260	265	270
Tyr Asp Met Thr Met Asp Glu Val	Arg Glu Phe Glu Arg Ala Thr Gln	
275	280	285
Glu Ala Thr Asn Lys Lys Ile Gly	Ile Phe Pro Pro Ala Ile Ser Ile	
290	295	300
Ser Ser Ile Pro Leu Leu Pro Ser	Ser Val Arg Ser Ala Pro Ser Ser	
305	310	315
Ala Pro Ser Thr Pro Leu Ser Thr	Asp Ala Pro Glu Phe Leu Ser Val	
325	330	335
Pro Lys Asp Arg Pro Arg Lys Lys	Ser Ala Pro Glu Thr Leu Thr Leu	
340	345	350
Pro Asp Pro Glu Lys Lys Ala Thr	Leu Asn Leu Pro Gly Met His Ser	
355	360	365
Ser Asp Lys Pro Cys Arg Pro Lys	Ser Glu	
370	375	

<210> 5953

<211> 777

<212> DNA

<213> Homo sapiens

<400> 5953

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 120
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 180
 aacagctttc tagttcaaga ggtgatggaa gaagagtgga atgctttgca gtcagtggag
 240
 aattgtccag aagacttggc tcagctggag gagctgatag acatggctgt gctggaggaa
 300
 attcaacagg agctgatcaa ccaagagcag tccatcatca gcgagtatga gaagagcttg
 360

cagtttgatg aaaagtgtct cagcatcatg ctggctgagt gggaggcaaa cccactcatc
 420
 tgtcctgtat gtacaaagcc tgtgatactt gggctgtgat cctctagagc cagcttggac
 480
 tcacatcatt ctatgggggtt gaagacaact cattccctct gaggagcctt gtacatacaa
 540
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 600
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 660
 agacaaactg ccttggagga gataaaccaa ttttatgtct atcatgttat acaaaaatct
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 777

<210> 5954
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 5954
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 20 25 30
 Cys Leu Glu Arg Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr
 35 40 45
 Arg Gln Leu Xaa Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu
 50 55 60
 Val Gln Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu
 65 70 75 80
 Asn Cys Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala
 85 90 95
 Val Leu Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile
 100 105 110
 Ile Ser Glu Tyr Glu Lys Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser
 115 120 125
 Ile Met Leu Ala Glu Trp Glu Ala Asn Pro Leu Ile Cys Pro Val Cys
 130 135 140
 Thr Lys Pro Val Ile Leu Gly Leu
 145 150

<210> 5955
 <211> 1459
 <212> DNA
 <213> Homo sapiens

<400> 5955
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 120
 gctcagcctg tgatctgtat ccactcagca tgcacttggg cagatgattt gtctgtgtgc
 180

tacccttccc cccatattac catacatatg cacggcggga ccagcagcga cggtagcagc
240
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300
gtctcagagg atgggaagat cctggcagaa gcagatggac tgagcacaaa ccactggctg
360
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420
gcaggggtgg atcctctggt accgctgcga agcttgggcc tatctctgag cgggtggggac
480
caggaggacg cggggaggat cctgatcgag gagctgaggg accgatttcc ctacctgagt
540
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600
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660
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720
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900
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1020
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1140
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1260
aatgccattg cttctattc ctacaccttt tcctaggggg ctggtcccgg ctccaccccc
1320
tccaagctca gtggacactg ggtctgaaag gaaggagtct tttgcttctt ttctcctttt
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1440
aaaaaaaaaa aagtcgacg
1459

<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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			20				25				30				
Arg	Phe	Lys	Ala	Leu	Pro	Pro	Gly	Ala	Gln	Pro	Val	Ile	Cys	Ile	His
		35					40					45			
Ser	Ala	Cys	Thr	Trp	Ala	Asp	Asp	Leu	Ser	Val	Cys	Tyr	Pro	Ser	Pro
	50					55					60				
His	Ile	Thr	Ile	His	Met	His	Gly	Gly	Thr	Ser	Ser	Asp	Gly	Ser	Ser
65					70					75					80
Ser	Met	Ala	Ala	Ile	Tyr	Gly	Gly	Val	Glu	Gly	Gly	Gly	Thr	Arg	Ser
				85				90						95	
Glu	Val	Leu	Leu	Val	Ser	Glu	Asp	Gly	Lys	Ile	Leu	Ala	Glu	Ala	Asp
			100					105					110		
Gly	Leu	Ser	Thr	Asn	His	Trp	Leu	Ile	Gly	Thr	Asp	Lys	Cys	Val	Glu
		115					120					125			
Arg	Ile	Asn	Glu	Met	Val	Asn	Arg	Ala	Lys	Arg	Lys	Ala	Gly	Val	Asp
	130					135					140				
Pro	Leu	Val	Pro	Leu	Arg	Ser	Leu	Gly	Leu	Ser	Leu	Ser	Gly	Gly	Asp
145					150					155					160
Gln	Glu	Asp	Ala	Gly	Arg	Ile	Leu	Ile	Glu	Glu	Leu	Arg	Asp	Arg	Phe
				165					170					175	
Pro	Tyr	Leu	Ser	Glu	Ser	Tyr	Leu	Ile	Thr	Thr	Asp	Ala	Ala	Gly	Ser
			180					185					190		
Ile	Ala	Thr	Ala	Thr	Pro	Asp	Gly	Gly	Val	Val	Leu	Ile	Ser	Gly	Thr
		195					200					205			
Gly	Ser	Asn	Cys	Arg	Leu	Ile	Asn	Pro	Asp	Gly	Ser	Glu	Ser	Gly	Cys
		210					215				220				
Gly	Gly	Trp	Gly	His	Met	Met	Gly	Asp	Glu	Gly	Ser	Ala	Leu	Ser	Ala
225				230					235						240
Pro	Ser	Ala	Tyr	Trp	Ile	Ala	His	Gln	Ala	Val	Lys	Ile	Val	Phe	Asp
				245					250					255	
Ser	Ile	Asp	Asn	Leu	Glu	Ala	Ala	Pro	His	Asp	Ile	Gly	Tyr	Val	Lys
			260					265					270		
Gln	Ala	Met	Phe	His	Tyr	Phe	Gln	Val	Pro	Asp	Arg	Leu	Gly	Ile	Leu
		275					280					285			
Thr	His	Leu	Tyr	Arg	Asp	Phe	Asp	Lys	Cys	Arg	Phe	Ala	Gly	Phe	Cys
	290				295					300					
Arg	Lys	Ile	Ala	Glu	Gly	Ala	Gln	Gln	Gly	Asp	Pro	Leu	Ser	Arg	Tyr
305				310						315					320
Ile	Phe	Arg	Lys	Ala	Gly	Glu	Met	Leu	Gly	Arg	His	Ile	Val	Ala	Val
				325					330					335	
Leu	Pro	Glu	Ile	Asp	Pro	Val	Leu	Phe	Gln	Gly	Lys	Ile	Gly	Leu	Pro
			340					345					350		
Ile	Leu	Cys	Val	Gly	Ser	Val	Trp	Lys	Ser	Trp	Glu	Leu	Leu	Lys	Glu
		355					360					365			
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5137

<212> DNA

<213> Homo sapiens

<400> 5957

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 120
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 180
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 240
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 300
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 360
 atcattctat ggggttgaag acaactcatt ccctctgagg agccttgtac atacaagcct
 420
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 480
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 600
 ataatagatt tgtacagaaa aaaatgataa taaatgagag cacaaaacat ataatttaaa
 660
 tctggtattt tttcccccat gatattagga tgataatcat ttcaaagcac atgtctagct
 720
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<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

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Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg
			20					25					30		
Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly
		35					40					45			
Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val
		50				55					60				
Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
65					70					75				80	
Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
				85				90						95	
Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Gly	Leu						

100

105

<210> 5959
 <211> 830
 <212> DNA
 <213> Homo sapiens

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 180
 ctacacagtg ttcatggcta tcctggcact tttgctaatt gtatgcatat tctatcagag
 240
 gaaacctggt ttcaaagatg ggtgacgggg gagagaaaat ttgctcttca aaaaatggac
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 360
 gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggt tataactgac
 420
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 480
 ttagtagatg attttaggat acgattaaca caagtgatga aagaagagac tagagcttcc
 540
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 660
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 720
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta
 780
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 830

<210> 5960
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 5960
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 Tyr Asp Asp Asn Leu Phe Cys His Leu Val Asp Glu Val Leu Leu Phe
 20 25 30
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
 35 40 45
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
 50 55 60
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
 65 70 75 80
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 5962

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Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
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Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
          20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
          35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
          50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
          85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
          100          105          110
Pro Ser

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<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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120
gaagaaaaag tgaaacgatc tgtgaaagat gctgccaaaga agggccagaa ggatgtctgc
180
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240
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480
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660
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720
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780
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840
tggcataaat aaatgcatca tttttaggag tatagacaga tatatcttat tgtggggagg
900

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ggaaagaaat ccattctgtc atgaagcact tctgaaaata taggtgattg cctgaatgtc
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 1020
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 1080
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 1140
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 1260
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<210> 5964
 <211> 222
 <212> PRT
 <213> Homo sapiens

<400> 5964
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 20 25 30
 Gln Ile Arg Asp Ile Gln Arg Glu Glu Lys Val Lys Arg Ser Val
 35 40 45
 Lys Asp Ala Ala Lys Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala
 50 55 60
 Lys Glu Met Ile Arg Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser
 65 70 75 80
 Lys Ala His Met Asn Ser Val Leu Met Gly Met Lys Asn Gln Leu Ala
 85 90 95
 Val Leu Arg Val Ala Gly Ser Leu Gln Lys Ser Thr Glu Val Met Lys
 100 105 110
 Ala Met Gln Ser Leu Val Lys Ile Pro Glu Ile Gln Ala Thr Met Arg
 115 120 125
 Glu Leu Ser Lys Glu Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu
 130 135 140
 Glu Asp Thr Phe Glu Ser Met Asp Asp Gln Glu Glu Met Glu Glu Glu
 145 150 155 160
 Ala Glu Met Glu Ile Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala
 165 170 175
 Leu Gly Lys Ala Pro Ser Lys Val Thr Asp Ala Leu Pro Glu Pro Glu
 180 185 190
 Pro Pro Gly Ala Met Ala Ala Ser Glu Asp Glu Glu Glu Glu Glu
 195 200 205
 Ala Leu Glu Ala Met Gln Ser Arg Leu Ala Thr Leu Arg Ser
 210 215 220

<210> 5965
 <211> 1011
 <212> DNA
 <213> Homo sapiens

<400> 5965

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 120
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 180
 ggaagcagtg ggccagggaa ttctcagaac agctttctag ttcaagaggt gatggaagaa
 240
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 360
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 420
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 480
 atcacaagcg gtgtgggtgt gtgtcagtgt ggcctgtcca tcccatctca ttcttctgag
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 660
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 720
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 780
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 840
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 900
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 1011

<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

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Ser	Leu	Arg	Ser	Pro	Arg	Arg	Ser	Leu	Tyr	Lys	Leu	Val	Gly	Ser	Pro
		20					25					30			
Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg	Met	Arg	Asn
		35				40					45				
Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly	Ser	Ser	Gly
	50				55					60					
Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val	Met	Glu	Glu
65				70					75				80		
Glu	Trp	Asn	Ala	Leu	Gln	Xaa	Gln	Trp	Xaa	Asn	Cys	Pro	Glu	Asp	Leu

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<400> 5967
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120
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180
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240
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300
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420
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480
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720
gccttggaga taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc
780
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840

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 960
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<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

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 35 40 45
 Tyr Phe Arg Lys Tyr Gly Thr Ser Phe Ile Glu Gln Val Ser Val Ser
 50 55 60
 His Leu Arg Pro Leu Leu Gly Gly Val Asp Asn Asn Ser Ser Asn Asn
 65 70 75 80
 Ser Asn Ser Ser Asn Gly Asp Ser Asp Ser Asn Arg Gln Ser Val Ser
 85 90 95
 Glu Cys Lys Val Trp Arg Asn Pro Leu Asn Leu Phe Arg Gly Ala Glu

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      115      120      125
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Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg
145      150      155      160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu
      165      170      175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala
      180      185      190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu
      195      200      205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr
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Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
225      230      235      240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
      245      250      255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
      260      265      270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
      275      280      285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
      290      295      300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
305      310      315      320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
      325      330      335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
      340      345      350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
      355      360      365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
      370      375      380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
385      390      395      400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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120

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<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
	20							25					30		
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
	35						40					45			
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50					55					60				
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65				70					75					80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85					90						95	
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
			100					105					110		
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
		115				120						125			
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<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 420
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
		20						25				30			
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
	35					40					45				
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
	50					55					60				
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70					75					80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
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Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
			100												

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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<210> 5974
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 5974
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 His Pro Gly Pro Ser Leu Thr Ser Gly Ala Leu Thr His Ile Arg Asp
 35 40 45
 Pro His Pro Gly Leu Ser Pro Thr Ser Gly Thr Leu Met Pro Gly Arg
 50 55 60
 Arg Arg Gly Gly Pro Ser Phe Gly Thr Pro Ala Leu Arg Arg Arg Lys
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 Cys His Arg Glu Ala Pro Ala Ser Gly Leu Ser Thr Ala Ala Arg Glu
 85 90 95
 Arg Leu Trp Trp Pro Arg Ala Arg Val Cys Arg
 100 105

<210> 5975
 <211> 2175
 <212> DNA
 <213> Homo sapiens

<400> 5975
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<210> 5976
 <211> 564
 <212> PRT
 <213> Homo sapiens

<400> 5976
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 35 40 45
 Pro Glu Val Ile Lys Asn Phe Ile Gln Tyr Phe His Lys Thr Val Ser
 50 55 60
 Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val Ser
 65 70 75 80
 Ser Asp Val Ile Asp Gln Lys Val Tyr Glu Ile Gln Asp Ile Tyr Glu
 85 90 95
 Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro Trp
 100 105 110
 Pro Glu Ala Glu Ala Ile Ala Pro Gln Val Gly Asn Asp Ala Val Phe
 115 120 125
 Leu Ile Leu Tyr Lys Glu Leu Tyr Tyr Arg His Ile Tyr Ala Lys Val
 130 135 140
 Ser Gly Gly Pro Ser Leu Glu Gln Arg Phe Glu Ser Tyr Tyr Asn Tyr
 145 150 155 160
 Cys Asn Leu Phe Asn Tyr Ile Leu Asn Ala Asp Gly Pro Ala Pro Leu
 165 170 175
 Glu Leu Pro Asn Gln Trp Leu Trp Asp Ile Ile Asp Glu Phe Ile Tyr
 180 185 190
 Gln Phe Gln Ser Phe Ser Gln Tyr Arg Cys Lys Thr Ala Lys Lys Ser
 195 200 205
 Glu Glu Glu Ile Asp Phe Leu Arg Ser Asn Pro Lys Ile Trp Asn Val
 210 215 220
 His Ser Val Leu Asn Val Leu His Ser Leu Val Asp Lys Ser Asn Ile
 225 230 235 240
 Asn Arg Gln Leu Glu Val Tyr Thr Ser Gly Gly Asp Pro Glu Ser Val
 245 250 255
 Ala Gly Glu Tyr Gly Arg His Ser Leu Tyr Lys Met Leu Gly Tyr Phe
 260 265 270
 Ser Leu Val Gly Leu Leu Arg Leu His Ser Leu Leu Gly Asp Tyr Tyr
 275 280 285
 Gln Ala Ile Lys Val Leu Glu Asn Ile Glu Leu Asn Lys Lys Ser Met
 290 295 300
 Tyr Ser Arg Val Pro Glu Cys Gln Val Thr Thr Tyr Tyr Tyr Val Gly
 305 310 315 320
 Phe Ala Tyr Leu Met Met Arg Arg Tyr Gln Asp Ala Ile Arg Val Phe

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Ala Asn Ile Leu Leu Tyr Ile Gln Arg Thr Lys Ser Met Phe Gln Arg
          340          345          350
Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln Asn Glu Gln Met His
          355          360          365
Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro Met Arg Ile Asp Glu
          370          375          380
Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly Asp Lys Met Leu Arg
385          390          395          400
Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr Ser
          405          410          415
Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His
          420          425          430
Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser
          435          440          445
Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu
          450          455          460
Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp
465          470          475          480
Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His Lys
          485          490          495
Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly Glu
          500          505          510
Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile
          515          520          525
His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile
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Gly Gln Arg Pro

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<210> 5977

<211> 2320

<212> DNA

<213> Homo sapiens

<400> 5977

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480

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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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		20						25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35					40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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Trp	Trp	Tyr	Thr	Pro	Val	Ile	Pro	Ala	Thr	Gln	Glu	Ala			
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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<210> 5980
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Thr His Leu Val Leu Ile Cys Tyr Asp Val Met Asn Pro Thr Ser Tyr
 50 55 60
 Asp Asn Val Leu Ile Lys Trp Phe Pro Glu Val Thr His Phe Cys Arg
 65 70 75 80
 Gly Ile Pro Met Val Leu Ile Gly Cys Lys Thr Asp Leu Arg Lys Asp
 85 90 95
 Lys Glu Gln Leu Arg Lys Leu Arg Ala Ala Gln Leu Glu Pro Ile Thr
 100 105 110
 Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr
 115 120 125
 Leu Glu Cys Ser Ala Lys Phe Arg Glu Asn Val Glu Asp Val Phe Arg
 130 135 140
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 Lys Lys Arg Arg Leu Cys Leu Leu Leu
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<210> 5981
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 5981
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<210> 5982
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 5982
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 35 40 45
 Asn Leu His Thr Leu Gly Gln Leu Lys Leu Ser Arg Arg Cys Arg Glu
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<210> 5983
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 <212> DNA
 <213> Homo sapiens

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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
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Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
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Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
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Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
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Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
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180

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 <211> 737
 <212> DNA
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<210> 5986
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 5986
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 20 25 30
 Asp Leu Leu Gln Asn Pro Tyr Phe Ser Lys Leu Leu Leu Asn Leu Ser
 35 40 45
 Gln His Val Asp Glu Ser Gly Leu Ser Leu Thr Leu Ala Lys Glu Gln
 50 55 60
 Ala Gln Ala Trp Lys Glu Val Arg Leu His Lys Thr Thr Trp Leu Arg
 65 70 75 80
 Ser Glu Ile Leu His Arg Val Ile Gln Glu Leu Leu Val Asp Tyr Tyr
 85 90 95
 Val Lys Ile Gln Asp Thr Asn Val Thr Ser Glu Asp Lys Lys Phe His

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Glu Thr Leu Glu Gln Arg Leu Leu Val Thr Glu Leu Met Arg Leu Leu					
	115		120		125
Gly Pro Ser Gln Glu Arg Glu Ile Pro Pro Leu Leu Gly Leu Glu Lys					
	130		135		140
Ala Asp Leu Leu Glu Leu Met Pro Leu Ser Glu Val Gly Gly Glu Ile					
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Leu Glu Pro Asn Lys					
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<210> 5987

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5987

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<210> 5988
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 5988
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 Thr Pro Ser Glu Arg Gly Met Thr Tyr Asp Ala Leu His Val Phe Asp
 35 40 45
 Trp Ile Lys Ala Arg Ser Gly Asp Asn Pro Val Tyr Ile Trp Gly His
 50 55 60
 Ser Leu Gly Thr Gly Val Ala Thr Ile Trp Cys Gly Ala Ser Val Ser
 65 70 75 80
 Glu Thr Pro Pro Asp Ala Leu Ile Leu Glu Ser Pro Phe Thr Asn Ile
 85 90 95
 Arg Glu Glu Ala Lys Ser His Pro Phe Ser Val Ile Tyr Arg Tyr Phe
 100 105 110
 Pro Gly Phe Asp Trp Phe Phe Leu Asp Pro Ile Thr Ser Ser Gly Ile
 115 120 125
 Lys Phe Ala Asn Asp Glu Asn Val Lys His Ile Ser Cys Pro Leu Leu
 130 135 140
 Ile Leu His Ala Glu Asp Asp Pro Val Val Pro Phe Gln Leu Gly Arg
 145 150 155 160
 Lys Leu Tyr Ser Ile Ala Ala Pro Ala Arg Ser Phe Arg Asp Phe Lys
 165 170 175
 Val Gln Phe Val Pro Phe His Ser Asp Leu Gly Tyr Arg His Lys Tyr
 180 185 190
 Ile Tyr Lys Ser Pro Glu Leu Pro Arg Ile Leu Arg Glu Phe Leu Gly
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 Lys Ser Glu Pro Glu His Gln His
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<210> 5989
 <211> 1583
 <212> DNA
 <213> Homo sapiens

<400> 5989

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<210> 5990
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 5990
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 35 40 45
 Val Asn Thr His Val Trp Thr Lys Ser Lys Phe Met Gly Met Ser Val
 50 55 60
 Gly Val Ser Met Ile Gly Glu Gly Val Leu Arg Leu Leu Glu His Gly
 65 70 75 80
 Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
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 Thr Ile Pro Trp Val Glu Leu Gly Gly Lys Val Ser Ile Asn Cys Ala
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 Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
 115 120 125
 Gly Gly Lys Val His Arg Val Thr Ala Glu Val Lys His Asn Pro Thr
 130 135 140
 Asn Thr Ile Val Cys Lys Ala His Gly Glu Trp Asn Gly Thr Leu Glu
 145 150 155 160
 Phe Thr Tyr Asn Asn Gly Glu Thr Lys Val Ile Asp Thr Thr Thr Leu
 165 170 175
 Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
 180 185 190
 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
 195 200 205
 Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
 210 215 220
 Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
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<210> 5991
 <211> 2440
 <212> DNA
 <213> Homo sapiens

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<210> 5992
 <211> 301
 <212> PRT
 <213> Homo sapiens

<400> 5992
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 Val Val Phe Asp Glu Ala Asp Arg Leu Phe Glu Met Gly Phe Ala Glu
 35 40 45
 Gln Leu Gln Glu Ile Ile Ala Arg Leu Pro Gly Gly His Gln Thr Val
 50 55 60
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 <212> PRT
 <213> Homo sapiens

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Gln	Arg	Pro	Asp	Gln	Leu	Asp	Lys	Val	Glu	Gln	Tyr	Arg	Arg	Arg	Glu
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Ala	Arg	Lys	Lys	Ala	Ser	Val	Glu	Ala	Arg	Leu	Lys	Ala	Ala	Ile	Gln
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Ser	Gln	Leu	Asp	Gly	Val	Arg	Thr	Gly	Leu	Ser	Gln	Leu	His	Asn	Ala
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Asp	Trp	Arg	Gln	Ser	Ile	Asn	Thr	Ile	Glu	Ser	Leu	Lys	Asp	Val	Lys
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Asp	Ala	Val	Val	Gln	His	Ser	Gln	Leu	Ala	Ala	Ala	Val	Glu	Asn	Leu
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Lys	Asn	Ile	Phe	Ser	Val	Pro	Glu	Ile	Val	Arg	Glu	Thr	Gln	Asp	Leu
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Ile	Glu	Gln	Gly	Ala	Leu	Leu	Gln	Ala	His	Arg	Lys	Leu	Met	Asp	Leu
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Gly	Asn	Thr	Arg	Asp	Met	Thr	Leu	Ile	His	Gly	Tyr	Phe	Gly	Ser	Thr
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Arg	Ser	Leu	Val	Thr	Val	Arg	Arg	Asp	Pro	Thr	Leu	Leu	Val	Ser	Val
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Lys	Glu	Lys	Met	Phe	Thr	Ile	Leu	Glu	Arg	Thr	Val	Thr	Thr	Arg	Ile
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Glu	Gly	Thr	Gln	Ala	Asp	Thr	Arg	Glu	Ser	Asp	Lys	Met	Trp	Leu	Val

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Ala Lys Asn Leu Met Val	Gln Cys Phe Pro Pro	His Tyr Glu Ile Phe
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Lys Asn Leu Leu Asn Met	Tyr His Gln Ala Leu	Ser Thr Arg Met Gln
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Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
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370	375	380
Pro His Val Val Ser Glu	Leu Leu Asp Thr Tyr	Met Ser Thr Leu Thr
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Ser Asn Ile Ile Ala Trp	Leu Arg Lys Ala Leu	Glu Thr Asp Lys Lys
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Asp Trp Val Lys Glu Thr	Glu Pro Glu Ala Asp	Gln Asp Gly Tyr Tyr
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Gln Thr Thr Leu Pro Ala	Ile Val Phe Gln Met	Phe Glu Gln Asn Leu
435	440	445
Gln Val Ala Ala Gln Ile	Ser Glu Asp Leu Lys	Thr Lys Val Leu Val
450	455	460
Leu Cys Leu Gln Gln Met	Asn Ser Phe Leu Ser	Arg Tyr Lys Asp Glu
465	470	475
Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
485	490	495
Cys Tyr Val Gln Tyr Met	Ile Ala Ile Asn Asn	Cys Gln Thr Phe
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Glu Glu Gly Val Ser Pro	Ser Gln Pro Ser Met	Asp Gly Ile Leu Asp
530	535	540
Ala Ile Ala Lys Glu Gly	Cys Ser Gly Leu Leu	Glu Glu Val Phe Leu
545	550	555
Asp Leu Glu Gln His Leu	Asn Glu Leu Met Thr	Lys Lys Trp Leu Leu
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Gly Ser Asn Ala Val Asp	Ile Ile Cys Val Thr	Val Glu Asp Tyr Phe
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Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu	Arg Ala Val Met Gln
610	615	620
Lys Arg Ile Ser Phe Arg	Ser Pro Glu Glu Arg	Lys Glu Gly Ala Glu
625	630	635
Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
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Ala Ser Gly Phe Gly Glu	Asp Val Asp Gly Tyr	Cys Asp Thr Ile Val
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Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro	Ser Leu Leu Tyr Leu
675	680	685
Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
690	695	700
Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala	Ser Arg Asp Met Lys

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<212> PRT

<213> Homo sapiens

<400> 6002

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 Trp Cys Tyr Val Ser Gly Glu Ala Gly Val Pro Glu Lys Arg Pro Cys
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 Glu Asp Leu Arg Cys Pro Glu Thr Thr Ser Gln Ala Leu Pro Ala Phe
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 Gln Val Phe Ala Pro Ala Asn Ala Leu Pro Ala Arg Ser Glu Ala Ala
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 Met Met Val Ile Ile Ile Ala Ile Gly Ala Gly Ile Ile Leu Gly Tyr
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 Ser Tyr Lys Arg Gly Lys Asp Leu Lys Glu Gln His Asp Gln Lys Val
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 Cys Glu Arg Glu Met Gln Arg Ile Thr Leu Pro Leu Ser Ala Phe Thr
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<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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 Gly Ser Ala His Ser Glu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro
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<210> 6007
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<213> Homo sapiens

<400> 6008

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			20					25					30		
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
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Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115				120						125			
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
	130					135						140			
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<213> Homo sapiens

<400> 6009

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 35 40 45
 Ala Met Ala Cys Ala Leu Gly Tyr Asp Ile His Phe His Asp Lys Lys
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 Ile Leu Leu Leu Glu Ala Gly Pro Lys Lys Val Leu Glu Lys Leu Ser
 65 70 75 80
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 Arg Ala Phe Arg Arg Met Gln Val Trp Asp Ala Cys Ser Glu Ala Leu
 115 120 125
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 Asn Asp Val Ile Met His Ala Leu Thr Lys Gln Leu Glu Ala Val Ser
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 Asp Arg Val Thr Val Leu Tyr Arg Ser Lys Ala Ile Arg Tyr Thr Trp
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 180 185 190
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 210 215 220
 Trp Asn Tyr Asp Gln Ser Ala Val Val Ala Thr Leu His Leu Ser Glu
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 275 280 285
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 325 330 335
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 370 375 380
 Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly
 385 390 395 400
 Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg
 405 410 415
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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
			35					40				45			
Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
			50					55				60			
Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
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Arg	Gly	Lys	Asn	Gly	Phe	Thr	Pro	Leu	His	Met	Ala	Val	Asp	Lys	Asp
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Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
			100						105					110	
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
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<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
			35				40					45			
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
			50			55					60				
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
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Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
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      130      135      140
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 <212> DNA
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<210> 6016
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 <212> PRT
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35      40      45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp	Ser Gln Lys Pro Ala			
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<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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Asn	Ser	Gln	Gln	Ala	Ala	Asn	Val	Leu	Ser	Gly	Ala	Cys	Gly	Leu	Gln
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Arg	Gly	Asp	Arg	Val	Ala	Val	Met	Leu	Pro	Arg	Val	Pro	Glu	Trp	Trp
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Leu	Val	Ile	Leu	Gly	Cys	Ile	Arg	Ala	Gly	Leu	Ile	Phe	Met	Pro	Gly
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Thr	Ile	Gln	Met	Lys	Ser	Thr	Asp	Ile	Leu	Tyr	Arg	Leu	Gln	Met	Ser
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Lys	Ala	Lys	Ala	Ile	Val	Ala	Gly	Asp	Glu	Val	Ile	Gln	Glu	Val	Asp
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Thr	Val	Ala	Ser	Glu	Cys	Pro	Ser	Leu	Arg	Ile	Lys	Leu	Leu	Val	Ser

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Glu Lys Ser Cys Asp	Gly Trp Leu Asn Phe	Lys Lys Leu Leu Asn Glu		
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Ala Ser Thr Thr His	His Cys Val Glu Thr	Gly Ser Gln Glu Ala Ser		
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Ala Ile Tyr Phe Thr	Ser Gly Thr Ser	Gly Leu Pro Lys Met Ala Glu		
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His Ser Tyr Ser Ser	Leu Gly Leu Lys Ala	Lys Met Asp Ala Gly Trp		
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Thr Gly Leu Gln Ala	Ser Asp Ile Met Trp Thr	Ile Ser Asp Thr Gly		
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Trp Ile Leu Asn Ile	Leu Gly Ser Leu Leu	Glu Ser Trp Thr Leu Gly		
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Ala Cys Thr Phe Val	His Leu Leu Pro Lys	Phe Asp Pro Leu Val Ile		
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Tyr Gly Gln Thr Glu	Thr Gly Leu Thr Cys	Met Val Ser Lys Thr Met		
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Lys Ile Lys Pro Gly	Tyr Met Gly Thr	Ala Ala Ser Cys Tyr Asp Val		
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Asp Ile Gly Ile Arg	Val Lys Pro Ile Arg	Pro Ile Gly Ile Phe Ser		
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Gly Tyr Val Glu Asn	Pro Asp Lys Thr Ala	Ala Asn Ile Arg Gly Asp		
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Phe Trp Leu Leu Gly	Asp Arg Gly Ile Lys	Asp Glu Asp Gly Tyr Phe		
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Gln Phe Met Gly Arg	Ala Asp Asp Ile Ile	Asn Ser Ser Gly Tyr Arg		
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Ile Gly Pro Ser Glu	Val Glu Asn Ala Leu	Met Lys His Pro Ala Val		
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Val Glu Thr Ala Val	Ile Ser Ser Pro Asp	Pro Val Arg Gly Glu Val		
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Val Lys Ala Phe Val	Val Leu Ala Ser Gln	Phe Leu Ser His Asp Pro		
	465	470		475
Glu Gln Leu Thr Lys	Glu Leu Gln Gln His	Val Lys Ser Val Thr Ala		
	485	490		495
Pro Tyr Lys Tyr Pro	Arg Lys Ile Glu Phe	Val Leu Asn Leu Pro Lys		
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Thr Val Thr Gly Lys	Ile Gln Arg Ala Lys	Leu Arg Asp Lys Glu Trp		
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<212> DNA

<213> Homo sapiens

<400> 6019

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<400> 6020

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Ile Glu Asp Ile Cys Ile Cys Cys Gly Ser Leu Gln Val His Thr Gln
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His Pro Leu Phe Glu Gly Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
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Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
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Ser Ile Cys Cys Ser Gly Glu Thr Leu Leu Ile Cys Gly Asn Pro Asp
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Cys Thr Arg Cys Tyr Cys Phe Glu Cys Val Asp Ser Leu Val Gly Pro
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Gly Thr Ser Gly Lys Val His Ala Met Ser Asn Trp Val Cys Tyr Leu
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Cys Leu Pro Ser Ser Arg Ser Gly Leu Leu Gln Arg Arg Arg Lys Trp
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Arg Ser Gln Leu Lys Ala Phe Tyr Asp Arg Glu Ser Glu Asn Pro Leu
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Glu Met Phe Glu Thr Val Pro Val Trp Arg Arg Gln Pro Val Arg Val
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Leu Ser Leu Phe Glu Asp Ile Lys Lys Glu Leu Thr Ser Leu Gly Phe
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Leu Glu Ser Gly Ser Asp Pro Gly Gln Leu Lys His Val Val Asp Val
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Thr Asp Thr Val Arg Lys Asp Val Glu Glu Trp Gly Pro Phe Asp Leu
 225          230          235          240
Val Tyr Gly Ala Thr Ala Pro Leu Gly His Thr Cys Asp Arg Pro Pro
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Ser Trp Tyr Leu Phe Gln Phe His Arg Phe Leu Gln Tyr Ala Arg Pro
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<212> DNA

<213> Homo sapiens

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<400> 6023

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<212> PRT

<213> Homo sapiens

<400> 6026

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Asn Glu Asn Glu Lys Ser Pro Ser Gln Asn Arg Lys Ala Lys Asp Ala
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Thr Ser Asp Asn Gly Lys Asp Gly Leu Ala Tyr Ser Ala Leu Leu Lys
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Asn Glu Leu Leu Gly Ala Gly Ile Glu Lys Val Gln Asp Pro Gln Thr
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Val Ser Pro Tyr Ser Leu Ser Pro Val Ser Asn Lys Ser Gln Lys Leu
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 3910

<210> 6038

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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 His Gly Gly Thr Cys Ser Arg Gln Glu Leu Gly Val Ser Asp Val Leu
 35 40 45
 Gly Tyr Val His Pro Asp Leu Leu Lys Asp Phe Cys Met Asn Pro Gln
 50 55 60
 Thr Val Leu Leu Leu Arg Val Ile Ala Ala Phe Cys Phe Leu Gly Ile
 65 70 75 80
 Leu Cys Ser Leu Ser Ala Phe Leu Leu Asp Val Phe Gly Pro Lys His
 85 90 95
 Pro Ala Leu Lys Ile Thr Arg Arg Tyr Ala Phe Ala His Ile Leu Thr
 100 105 110
 Val Leu Gln Cys Ala Thr Val Ile Gly Phe Ser Tyr Trp Ala Ser Glu
 115 120 125
 Leu Ile Leu Ala Gln Gln Gln Gln His Lys Lys Tyr His Gly Ser Gln
 130 135 140
 Val Tyr Val Thr Phe Ala Val Ser Phe Tyr Leu Val Ala Gly Ala Gly
 145 150 155 160
 Gly Ala Ser Ile Leu Ala Thr Ala Ala Asn Leu Leu Arg His Tyr Pro
 165 170 175
 Thr Glu Glu Glu Glu Gln Ala Leu Glu Leu Leu Ser Glu Met Glu Glu
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 Asn Glu Pro Tyr Pro Ala Glu Tyr Glu Val Ile Asn Gln Phe Gln Pro
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 Pro Pro Ala Tyr Thr Pro
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<210> 6039
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 <212> DNA
 <213> Homo sapiens

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 <211> 312
 <212> PRT
 <213> Homo sapiens

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 Gln Val Trp Ala Ala Glu Ser Ala Leu Arg Gly Glu Pro Leu Trp Ala
 35 40 45
 Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu
 50 55 60
 Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val
 65 70 75 80
 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala
 85 90 95
 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala
 100 105 110
 Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His
 115 120 125
 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln
 130 135 140
 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys
 145 150 155 160
 Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly
 165 170 175
 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val
 180 185 190
 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg
 195 200 205
 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln
 210 215 220
 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys
 225 230 235 240
 Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu
 245 250 255
 Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp
 260 265 270
 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys
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 305 310

<210> 6041
 <211> 291
 <212> DNA
 <213> Homo sapiens

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 291

<210> 6042
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 6042
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 20 25 30
 Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
 35 40 45
 Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
 50 55 60
 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
 65 70 75 80
 Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr Met Gln Gln Leu Tyr
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<210> 6043
 <211> 558
 <212> DNA
 <213> Homo sapiens

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 240
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 300
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<210> 6044
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 6044

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 20 25 30
 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
 35 40 45
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
 50 55 60
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
 65 70 75 80
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
 85 90 95
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
 100 105 110
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
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 Thr Leu Cys Leu Asp Ile Ser Tyr
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<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

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Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
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Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
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<210> 6047
<211> 773
<212> DNA
<213> Homo sapiens
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<400> 6047

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<210> 6048

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6048

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			20					25					30		
Gly	Thr	Thr	Leu	Glu	Lys	Ser	Cys	Leu	His	His	Cys	Ser	Gly	Gly	Gly
		35					40					45			
His	Leu	Pro	Ser	Ala	Cys	Leu	Gly	Ala	Arg	Arg	Ser	Ser	Ser	Leu	Leu
	50					55					60				
Gly	Tyr	Gly	Ser	Cys	Arg	Asp	Thr	Gln	Ser	Trp	Thr	Pro	Asp	Pro	Leu
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Pro	His	Pro	Pro	Ser	Leu	Ser	Pro	Gln	Ser	Leu	Leu	Tyr	Ser	Gln	Ala
				85				90						95	
Met	Arg	Ser	Pro	Ile	Ser	His	Gln	Glu	Leu	Thr	Arg	Pro	Leu	Gly	Lys
			100					105					110		
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<210> 6049
<211> 479
<212> DNA
<213> Homo sapiens

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479

<210> 6050
<211> 159
<212> PRT
<213> Homo sapiens

<400> 6050
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Ala Lys Lys Arg Lys Leu Asn Ser Ser Ser Ser Ser Ser Asn Ser
35 40 45
Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Thr
50 55 60
Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe
65 70 75 80
Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys
85 90 95
Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys
100 105 110
Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala
115 120 125
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<210> 6051
<211> 2404
<212> DNA
<213> Homo sapiens

<400> 6051
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<210> 6052
 <211> 518
 <212> PRT
 <213> Homo sapiens

<400> 6052
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 Gln Pro Gln Val Met Lys Leu Leu Asp Ser Leu Arg Glu Gln Tyr Thr
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 Arg Tyr Gln Glu Val Cys Arg Gln Arg Ser Lys Arg Thr Gln Leu Glu
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 Glu Ile Gln Gln Lys Val Met Gln Val Val Asn Trp Leu Glu Gly Pro
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Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa
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His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys
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Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln
305              310              315              320
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Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn
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Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu
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465              470              475              480
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<210> 6053

<211> 3257

<212> DNA

<213> Homo sapiens

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<210> 6054

<211> 382

<212> PRT

<213> Homo sapiens

<400> 6054

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Met	Ala	Arg	Gln	Lys	Gly	Ile	Phe	Tyr	Leu	Thr	Leu	Phe	Leu	Ile	Leu
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Pro	Gly	Thr	Val	Leu	Glu	Val	Leu	Ile	Cys	Phe	Phe	Thr	Leu	Trp	Ser
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Pro	Leu	Glu	Glu	Ser	Gly	Ser	Arg	Pro	Pro	Ser	Thr	Gln	Glu	Thr	Ser
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<210> 6055
 <211> 2089
 <212> DNA
 <213> Homo sapiens

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 <211> 285
 <212> PRT
 <213> Homo sapiens

<400> 6056
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 Leu Asn Gly Glu Ile Met Glu Tyr Asp Leu Gln Ala Leu Asn Ile Lys
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 Tyr Ala Met Asp Ala Phe Gly Gly Pro Ile Trp Ser Met Ala Ala Ser
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 Pro Ser Gly Ser Gln Leu Leu Val Gly Cys Glu Asp Gly Ser Val Lys
 130 135 140
 Leu Phe Gln Ile Thr Pro Asp Lys Ile Gln Phe Glu Arg Asn Phe Asp

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His	Ile	Ala	Ala	Gly	Ser	Ile	Asp	Tyr	Ile	Ser	Val	Phe	Asp	Val Lys
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Ser	Ala	Thr	Gly	Thr	Leu	Val	Lys	Ser	His	Leu	Ile	Ala	Asn	Ala Asp
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Val	Gln	Ser	Ile	Ala	Val	Ala	Asp	Gln	Glu	Asp	Ser	Phe	Val	Val Gly
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<211> 3924

<212> DNA

<213> Homo sapiens

<400> 6057

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 6058

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Val Asn Arg Arg Arg His Asn Ser Ser Asp Gly Phe Asp Ser Ala Ile
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Gly Arg Pro Asn Gly Gly Asn Phe Gly Arg Lys Glu Lys Asn Gly Trp
65          70          75          80
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          85          90          95
Tyr His Gly Gly Ser Ser Arg Ser Arg Ser Ser Ile Phe His Ala Gly
          100          105          110
Lys Ser Gln Gly Leu His Glu Asn Asn Ile Pro Asp Asn Glu Thr Gly
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Arg Lys Glu Asp Lys Arg Glu Arg Lys Gln Phe Glu Ala Glu Asp Phe
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Pro Ser Leu Asn Pro Glu Tyr Glu Arg Glu Pro Asn His Asn Lys Ser
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Leu Ala Ala Gly Val Trp Gly Leu His Ala Gln Thr His Thr Tyr Pro
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          195          200          205
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Pro Val Lys Asn Gly Thr Gly Pro Ser Val Tyr Lys Gly Leu Val Pro
225          230          235          240
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Ser Thr Asn Ser Val Lys Glu Cys Asn Arg Ser Asn Ser Ser Ser Pro
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305          310          315          320
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<211> 313

<212> PRT

<213> Homo sapiens

<400> 6060

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			20					25					30		
Ile	Ser	Tyr	Thr	Ile	Thr	Ile	Phe	Gly	Asn	Val	Ser	Ile	Met	Met	Val
		35					40					45			
Cys	Ile	Leu	Asp	Pro	Lys	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Thr
	50					55					60				
Asn	Leu	Ser	Ile	Leu	Asp	Leu	Cys	Tyr	Thr	Thr	Thr	Thr	Val	Pro	His
65					70					75				80	
Met	Leu	Val	Asn	Ile	Gly	Cys	Asn	Lys	Lys	Thr	Ile	Ser	Tyr	Ala	Gly
			85						90					95	
Cys	Val	Ala	His	Leu	Ile	Ile	Phe	Leu	Ala	Leu	Gly	Ala	Thr	Glu	Cys
			100					105					110		
Leu	Leu	Leu	Ala	Val	Met	Ser	Phe	Asp	Arg	Tyr	Val	Ala	Val	Cys	Arg
		115					120					125			
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Ser	Leu	Thr	Leu	Asn	Met	Pro	Arg	Cys	Gly	His	Gln	Glu	Val	Asp	His
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	195						200						205		
Ile	Pro	Val	Thr	Leu	Ile	Leu	Ile	Ser	Tyr	Gly	Phe	Ile	Ala	Gln	Ala
	210					215					220				
Val	Leu	Lys	Ile	Arg	Ser	Ala	Glu	Gly	Arg	Gln	Lys	Ala	Phe	Gly	Thr
225					230					235				240	
Cys	Gly	Ser	His	Met	Ile	Val	Val	Ser	Leu	Phe	Tyr	Gly	Thr	Ala	Ile
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Tyr	Met	Tyr	Leu	Gln	Pro	Pro	Ser	Ser	Thr	Ser	Lys	Asp	Trp	Gly	Lys

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 <212> DNA
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<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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			20					25					30		
Arg	Pro	Arg	Asp	Leu	Leu	Gln	Arg	Tyr	Asp	Ser	Lys	Pro	Ile	Val	Asp
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	50					55				60					
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Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	Met	Ser	His	Cys	Ile	Ala
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Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
			100					105					110		
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Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
	130					135					140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
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Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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 Thr Ala His Tyr Asp Pro Gly His Cys Phe Ala Glu Ser Arg Glu Leu
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 130 135 140
 Lys Lys Ile Leu Phe Tyr Cys His Phe Pro Asp Leu Leu Leu Thr Lys

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          180          185          190
Phe Thr Ala Ala Val Phe Lys Glu Thr Phe Lys Ser Leu Ser His Ile
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<211> 2084

<212> DNA

<213> Homo sapiens

<400> 6065

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 1980
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<210> 6066
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 6066
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 35 40 45
 Ile Ile Glu Asp Trp Asp Leu Met Glu Arg Phe Met Glu Gln Val Val
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<210> 6067
 <211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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<210> 6068

<211> 117

<212> PRT

<213> Homo sapiens

<400> 6068

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			20					25					30		
Ser	Leu	Phe	Leu	Ser	Gly	Asn	Val	Ser	Ser	Arg	Arg	Met	Arg	Thr	Ala
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	50				55					60					
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Pro	Ala	Tyr	Ser	His	Ser	Ala	Val	Gly	Arg	Pro	Pro	Leu	Pro	Arg	Lys
			85					90					95		
Arg	Gly	Ala	Val	Ser	Ser	Gly	Arg	Leu	His	Arg	Arg	Gly	Thr	Gly	Ala
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<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
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	50					55					60				
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65					70				75					80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85					90						95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100						105					110		
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
		115					120					125			
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<210> 6071

<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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 <211> 76
 <212> PRT
 <213> Homo sapiens

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<210> 6073
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 <212> DNA
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<210> 6074
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
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<210> 6075
 <211> 4668
 <212> DNA
 <213> Homo sapiens

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<210> 6076

<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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 Glu Val Gly Leu Ala Leu Lys Asp Leu Ala Lys Gln Tyr Ser Asp Arg
 35 40 45
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 Cys Lys Ala Ile Glu Arg Gly Thr Gly Asn Asp Asn Tyr Arg Thr Thr
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 Gly Ile Ala Thr Ile Glu Val Phe Leu Pro Pro Arg Leu Lys Lys Asp
 85 90 95
 Arg Lys Asn Leu Leu Glu Thr Arg Leu His Ile Thr Gly Arg Glu Leu
 100 105 110
 Arg Ser Lys Ile Ala Glu Thr Phe Gly Leu Gln Glu Asn Tyr Ile Lys
 115 120 125
 Ile Val Ile Asn Lys Lys Gln Leu Gln Leu Gly Lys Thr Leu Glu Glu
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5259

595

600

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<213> Homo sapiens

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5260

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<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
			35				40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
			50				55				60				
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
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Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
				85						90				95	
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
			100					105					110		
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
			115				120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
			130				135				140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145				150					155					160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
				165					170					175	
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

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 195 200 205
 Cys Pro Glu Tyr Gln
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<210> 6079
 <211> 651
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 6080
 <211> 162
 <212> PRT
 <213> Homo sapiens

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 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
 35 40 45
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
 50 55 60
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
 65 70 75 80
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
 85 90 95
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

	100		105		110										
Met	Lys	Ser	Val	Leu	Trp	Trp	Leu	Pro	Val	Glu	Lys	Ala	Phe	Trp	Arg
	115						120					125			
Gln	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Ile	Arg	Glu	Arg	Leu	Glu	His	Pro
	130					135					140				
Val	Leu	His	Val	Ser	Trp	Asn	Asp	Ala	Arg	Ala	Tyr	Cys	Ala	Trp	Arg
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Gly	Lys														

<210> 6081

<211> 655

<212> DNA

<213> Homo sapiens

<400> 6081

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120
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240
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540
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655

<210> 6082

<211> 218

<212> PRT

<213> Homo sapiens

<400> 6082

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Ala	Glu	Thr	Asp	Glu	Gly	Trp	Leu	Asp	Val	Val	Gln	Ser	Leu	Ile	Arg
		20					25				30				
Val	Ile	Pro	Leu	Glu	Asp	Pro	Leu	Gly	Pro	Ala	Val	Ile	Thr	Leu	Leu
	35					40				45					
Leu	Asp	Glu	Cys	Pro	Leu	Pro	Thr	Lys	Asp	Ala	Leu	Gln	Lys	Leu	Thr
	50				55				60						
Glu	Ile	Leu	Asn	Leu	Asn	Gly	Glu	Val	Ala	Cys	Gln	Asp	Ser	Ser	His

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65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
          145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
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Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
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<210> 6083
 <211> 358
 <212> DNA
 <213> Homo sapiens

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120
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358

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<210> 6084
 <211> 101
 <212> PRT
 <213> Homo sapiens

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<400> 6084
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20          25          30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35          40          45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50          55          60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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1260

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<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20				25						30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35					40						45		
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50				55				60						
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
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Asp	Ser	Thr	Val												

<210> 6087
<211> 1506
<212> DNA
<213> Homo sapiens

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<210> 6088
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 6088
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 35 40 45
 Ala Glu Thr His Phe Gly Phe Glu Thr Val Ser Glu Glu Glu Lys Gly
 50 55 60
 Gly Lys Val Tyr Gln Val Phe Glu Ser Val Ala Lys Lys Tyr Asp Val
 65 70 75 80
 Met Asn Asp Met Met Ser Leu Gly Ile His Arg Val Trp Lys Asp Leu
 85 90 95
 Leu Leu Trp Lys Met His Pro Leu Pro Gly Thr Gln Leu Leu Asp Met
 100 105 110
 Ala Gly Gly Thr Gly Asp Ile Ala Phe Arg Phe Leu Asn Tyr Val Gln
 115 120 125
 Ser Gln His Gln Arg Lys Gln Lys Arg Gln Leu Arg Ala Gln Gln Asn
 130 135 140
 Leu Ser Trp Glu Glu Ile Ala Lys Glu Tyr Gln Asn Glu Glu Asp Ser
 145 150 155 160
 Leu Gly Gly Ser Arg Val Val Val Cys Asp Ile Asn Lys Glu Met Leu
 165 170 175
 Lys Val Gly Lys Gln Lys Ala Leu Ala Gln Gly Tyr Arg Ala Gly Leu
 180 185 190
 Ala Trp Val Leu Gly Asp Ala Glu Glu Leu Pro Phe Asp Asp Lys
 195 200 205
 Phe Asp Ile Tyr Thr Ile Ala Phe Gly Ile Arg Asn Val Thr His Ile
 210 215 220
 Asp Gln Ala Leu Gln Glu Ala His Arg Val Leu Lys Pro Gly Gly Arg
 225 230 235 240
 Phe Leu Cys Leu Glu Phe Ser Gln Val Asn Asn Pro Leu Ile Ser Arg
 245 250 255
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 260 265 270
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 275 280 285
 Arg Phe Pro Ser Gln Glu Glu Phe Lys Asp Met Ile Glu Asp Ala Gly
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325

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<211> 4211

<212> DNA

<213> Homo sapiens

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<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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Phe Arg Cys Glu Glu Cys Gly Lys Ser Tyr Asn Gln Arg Val His Leu
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Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
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785          790          795          800
Phe Gln Cys Lys Glu Cys Gly Met Asn Phe Ser Trp Ser Cys Ser Leu
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<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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<213> Homo sapiens

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Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser			
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Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly			
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Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala			
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<210> 6093

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 6093

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<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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<210> 6095

<211> 441

<212> DNA

<213> Homo sapiens

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<210> 6096

<211> 97

<212> PRT

<213> Homo sapiens

<400> 6096

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Lys	Lys	Trp	Asn	Ala	Val	Ala	Met	Trp	Ser	Trp	Asp	Val	Glu	Cys	Asp				
		35					40					45							
Thr	Cys	Ala	Ile	Cys	Arg	Val	Gln	Val	Met	Val	Val	Trp	Gly	Glu	Cys				
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Asn	His	Ser	Phe	His	Asn	Cys	Cys	Met	Ser	Leu	Trp	Val	Lys	Gln	Asn				
65					70					75				80					
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<210> 6097

<211> 2404

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> PRT

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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Ile Gly Gln Ser Pro Val Arg Val Leu Lys Glu Ile Asp Gly Phe Val
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Leu Asn Arg Leu Gln Tyr Ala Val Ile Ser Glu Ala Trp Arg Leu Val
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Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp
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Gly Leu Gly Met Arg Tyr Ala
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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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1846

<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106
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 Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
 35 40 45
 His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
 50 55 60
 Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
 65 70 75 80
 Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
 85 90 95
 Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
 100 105 110
 His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
 115 120 125
 Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
 130 135 140
 Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
 145 150 155 160
 Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
 165 170 175
 Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
 180 185 190
 Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
 195 200 205
 Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
 210 215 220
 Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
 225 230 235 240
 Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
 245 250 255
 Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
 260 265 270
 Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
 275 280 285
 Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
 290 295 300
 Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
 305 310 315 320
 Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
 325 330 335
 Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
 340 345 350
 Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
 355 360 365
 Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
 370 375 380
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 385 390 395 400
 Arg Ser Pro Ser His
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<210> 6107
 <211> 896
 <212> DNA
 <213> Homo sapiens

<400> 6107
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 720
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<210> 6108
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 6108
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 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
			100					105					110		
Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr				
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<210> 6109
<211> 2087
<212> DNA
<213> Homo sapiens
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<400> 6109
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 2087

<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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		20						25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
		35					40					45			
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
	50					55					60				
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70				75					80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85					90						95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100				105						110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
		115				120						125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
	130					135					140				
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

145		150		155		160
Gly	Pro	Gly	Val	Pro	Gln	Ala
		165		170		175
Leu	Arg	Ala	Cys	Val	Leu	Val
		180		185		190
Glu	Gly	Leu	Ala	Val	Gly	Leu
		195		200		205
Leu	Cys	Leu	Ala	Leu	Leu	His
		210		215		220
Ser	Leu	Arg	Leu	Leu	Gln	Ser
		225		230		235
Cys	Gly	Ile	Leu	Phe	Ser	Cys
		245		250		255
Ala	Ala	Leu	Ala	Glu	Ser	Ala
		260		265		270
Val	Leu	Glu	Gly	Met	Ala	Ala
		275		280		285
Glu	Ile	Leu	Pro	Gln	Glu	Leu
		290		295		300
Val	Ile	Leu	Leu	Leu	Ala	Gly
		305		310		315
Ile	Gln	Ile				320

<210> 6111

<211> 1706

<212> DNA

<213> Homo sapiens

<400> 6111

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 180
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<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

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Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
			20					25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
			35				40					45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55				60					
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65					70				75					80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
				85				90						95	
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113
<211> 1095
<212> DNA
<213> Homo sapiens

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180
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240
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300
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360
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420
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480
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540
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720
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1095

<210> 6114
<211> 87
<212> PRT
<213> Homo sapiens

<400> 6114
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      20             25             30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35             40             45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50             55             60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65             70             75             80
Leu Asp Arg Gln Lys Glu Leu
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<210> 6115

<211> 411

<212> DNA

<213> Homo sapiens

<400> 6115

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411

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<210> 6116

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6116

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Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20             25             30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35             40             45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50             55             60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65             70             75             80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85             90             95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
      100            105            110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

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Arg 115 120 125

<210> 6117
 <211> 962
 <212> DNA
 <213> Homo sapiens

<400> 6117
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 120
 tcgggaggcg acaagatggt ctccctcaag aagtggaacg cgggtggccat gtggagctgg
 180
 gacgtggagt gcgatacgtg cgccatctgc agggctccagg tgatggatgc ctgtcttaga
 240
 tgtcaagctg aaaacaaaca agaggactgt gttgtggtct ggggagaatg taatcattcc
 300
 ttccacaact gctgcatgtc cctgtgggtg aaacagaaca atcgctgccc tctctgccag
 360
 caggactggg tgggtccaaag aatcggcaaa tgagagtggg tagaaggctt cttagcgcag
 420
 ttgttcagag ccctggtgga tcttgtaatc cagtgcctta caaaggctag aacactacag
 480
 gggatgaatt cttcaaatag gagccgatgg atctgtggtc ctttgggact catcaaagcc
 540
 ttggtttagc attttgtcag ttttatcttc agaaattctc tgcgattaag aagataattt
 600
 attaaagggtg gtccttctta cctctgtggt gtgtgtcgcg cacacagctt agaagtgtca
 660
 taaaaaagga aagagctcca aattgaatca cttttataat ttaccattt ctatacaaca
 720
 ggcagtggaa gcagtttcag agaacttttt gcatgcttat ggttgatcag ttaaaaaaga
 780
 atgttacagt aacaaataaa gtgcagttta aaacccaact cttactctta atttgttct
 840
 aatacgtatt tttggcaggg agagggaaac gtccatgaaa tctttatgtg atataaggat
 900
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 960
 aa
 962

<210> 6118
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 6118
 Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His
 1 5 10 15
 Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu


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                20                25                30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
                35                40                45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
                50                55                60
Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
65                70                75                80
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
                85                90                95
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
                100                105                110
Lys

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<210> 6119
 <211> 375
 <212> DNA
 <213> Homo sapiens

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<400> 6119
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ccccacacc ccacacggac tgcacggaaa tatcacagta accatctctc agtcacagcg
120
tggccccaca gaactcatgc ctgcttgctt taaaccacc aatgaaaact ccccatggga
180
aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtcctctgtc
240
tctgcctctc tcttgccctt acccactggt tgagcatgtg tgtcccaaac ggccctgcaa
300
ggtgtgctgc cctgttcttt ctgggctctg tcaaggaatc aaactgcttc tgttatgtga
360
tgtgtcatgt tgtgc
375

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<210> 6120
 <211> 118
 <212> PRT
 <213> Homo sapiens

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<400> 6120
Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His
1                5                10                15
Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser
                20                25                30
Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn
                35                40                45
Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn
50                55                60
Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro
65                70                75                80
Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys
                85                90                95
Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

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100
Cys Asp Val Ser Cys Cys
115

105

110

<210> 6121
<211> 1039
<212> DNA
<213> Homo sapiens

<400> 6121
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ttgtaaacat tgatttgaat gatgacaaca tttgcagtgt ttgtaaactg ggaacagaca
120
aagaaacact ctcttctgc cacatttgtt ttgagctaaa tattgagggg gtaccaaagt
180
ctgatctctt gcacaccaa tcataggg gccataaaga ctgctttgaa aaataccatt
240
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta
300
aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg
360
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc
420
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga
480
tagatggaag tgcagggtggc atctctaact gtacacaaag aattttggag cagagggaaa
540
atacagactt tggactttct atgttacaag attcaggtgc cactttatgt cgtaacagt
600
tattgtggcc tcatagtcac aaccaggcac agaaaaaaga agagacaatc tctagtccag
660
aggctaattg ccagaccag catccacatt acagcagaga ggaataagtt tttgaagagt
720
taactcacca agtgcaagaa aaagattctt tggcctcaca gctccatgtc cgccacgttg
780
ccatcgaaca gcttctgaag aactgttcta agttaccatg tctgcaagta gggcgaacag
840
gaatgaagtc gcacctacc ataaacaact gacctaaaca gacttacttc gtatgccctg
900
ccctttattg gtctcccaga catgcaaact ttgaagaagt ttgaagaaag ttgtggtccg
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1020
aagcagatca ttatactct
1039

<210> 6122
<211> 221
<212> PRT
<213> Homo sapiens

<400> 6122
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Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe			
	20	25	30
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp			
	35	40	45
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys			
	50	55	60
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys			
	65	70	75
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp			
	85	90	95
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys			
	100	105	110
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu			
	115	120	125
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala			
	130	135	140
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg			
	145	150	155
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln			
	165	170	175
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser			
	180	185	190
His Asn Gln Ala Gln Lys Lys Glu Thr Ile Ser Ser Pro Glu Ala			
	195	200	205
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu			
	210	215	220

<210> 6123

<211> 900

<212> DNA

<213> Homo sapiens

<400> 6123

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 gcgaaacaac aagagaaaaa aaaggaagct gccctctgcc caaaaccac gtcgaggtcc
 180
 ccaaactgg gacccttagg tcttttctca cttagcgtgc ccaaccttct cctggcagga
 240
 aacaagcctc caggtctgct tccccgcaaa ggactataca tggcaaataa cttaaagctc
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 360
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 420
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 480
 ctctgggaat cctctgggag gaccttgat gactttctga ccttccccag gcacgttttc
 540
 agggtcata tctgtcccc gcccggggga tctactgtcc tcccagtcac acccctctcc
 600

ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag
 660
 agcatcctgg cggctgcaga gaaggctggt atgtctgcag aacaagccca gggacttctg
 720
 gaaaagatcg caacgccaaa ggtgaagaac cagctcaagg agaccactga ggcagcctgc
 780
 agatacggag cctttgggct gccatcacc gtggcccatg tggatggcca aaccacatg
 840
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 900

<210> 6124
 <211> 300
 <212> PRT
 <213> Homo sapiens

<400> 6124
 Xaa His Ala Cys Ile Pro Gln Leu Leu Gly Arg Leu Arg Arg Glu Asn
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 Arg Leu Asn Pro Gly Gly Gly Gly Cys Gly Glu Leu Arg Ser His His
 20 25 30
 Cys Thr Pro Ala Trp Ala Thr Arg Ala Lys Gln Gln Glu Lys Lys Lys
 35 40 45
 Glu Ala Ala Leu Cys Pro Lys Pro Thr Ser Arg Ser Pro Asn Leu Gly
 50 55 60
 Pro Leu Gly Leu Phe Ser Leu Ser Val Pro Asn Leu Leu Ala Gly
 65 70 75 80
 Asn Lys Pro Pro Gly Leu Leu Pro Arg Lys Gly Leu Tyr Met Ala Asn
 85 90 95
 Asp Leu Lys Leu Leu Arg His His Leu Gln Ile Pro Ile His Phe Pro
 100 105 110
 Lys Asp Phe Leu Ser Val Met Leu Glu Lys Gly Ser Leu Ser Ala Met
 115 120 125
 Arg Phe Leu Thr Ala Val Asn Leu Glu His Pro Glu Met Leu Glu Lys
 130 135 140
 Ala Ser Arg Glu Leu Trp Met Arg Val Trp Ser Arg Val Ser Val Gly
 145 150 155 160
 Leu Trp Glu Ser Ser Gly Arg Thr Leu Asp Asp Phe Leu Thr Phe Pro
 165 170 175
 Arg His Val Phe Arg Val Met Ile Leu Pro Pro Pro Gly Gly Ser Thr
 180 185 190
 Val Leu Pro Val Thr Pro Leu Ser Pro His Arg Leu Pro Ala Val Phe
 195 200 205
 Ser Ser Ser Gln Asn Glu Asp Ile Thr Glu Pro Gln Ser Ile Leu Ala
 210 215 220
 Ala Ala Glu Lys Ala Gly Met Ser Ala Glu Gln Ala Gln Gly Leu Leu
 225 230 235 240
 Glu Lys Ile Ala Thr Pro Lys Val Lys Asn Gln Leu Lys Glu Thr Thr
 245 250 255
 Glu Ala Ala Cys Arg Tyr Gly Ala Phe Gly Leu Pro Ile Thr Val Ala
 260 265 270
 His Val Asp Gly Gln Thr His Met Leu Phe Gly Ser Asp Arg Met Glu
 275 280 285
 Leu Leu Ala His Leu Leu Gly Glu Lys Trp Met Gly

290

295

300

<210> 6125
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 6125
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 120
 ggagaattga aggggctgca ggagcaaata gcagaaacca aagcccggct tatcacgcag
 180
 cagcatgac gggcccaaga gcagagtga catgccttga tgctgctga gctccagaag
 240
 ctgctgcagg aggagaggac ccagcgccag gacttggagc ttaggttaga agagaccga
 300
 gaagccttgg caggacgagc atatgcagct gaacagatgg aaggattga actgcagacc
 360
 aagcagctga cccgtgaggt ggaggagctg aaaagtgaac tgcaggccat tcgagatgag
 420
 aagaatcagc cagacccccg gctgcaagaa cttcaggaag aggccgcc
 468

<210> 6126
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 6126
 Xaa Thr Val Thr Gln Glu Lys Ser Arg Met Glu Ala Ser Tyr Leu Ala
 1 5 10 15
 Asp Lys Lys Lys Met Lys Gln Asp Leu Glu Asp Ala Ser Asn Lys Ala
 20 25 30
 Glu Glu Glu Arg Ala Arg Leu Glu Gly Glu Leu Lys Gly Leu Gln Glu
 35 40 45
 Gln Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg
 50 55 60
 Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys
 65 70 75 80
 Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu
 85 90 95
 Glu Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln
 100 105 110
 Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu
 115 120 125
 Glu Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro
 130 135 140
 Asp Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala
 145 150 155

<210> 6127
 <211> 1900

<212> DNA

<213> Homo sapiens

<400> 6127

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120
cgggcaagag actccaatat ggtgagggcg gcagcagagc tggccctgag ctgcctgcct
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cacgcccattg cattgaaccc taatgagatc cagcgggccc tgggtgcagtg caaggaacag
240
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300
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360
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420
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480
gttacagtgg cagcggcagc agtgacagca gcagccacag tggtgcccgt catatcggtg
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600
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660
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720
taccacagg gtgtgcatcc tgcattccta ggggtcagt acccttatc agtgactcct
780
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840
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1140
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1380
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1500

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 1800
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 1860
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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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Thr	Ile	Leu	Val	Glu	Cys	Trp	Asp	Gly	His	Leu	Thr	Pro	Pro	Glu	Val
		20						25					30		
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
		35					40					45			
Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
	50					55				60					
Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70					75					80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85					90					95		
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
		100					105					110			
Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
		115					120					125			
Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
	130					135					140				
Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
145					150					155				160	
Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
			165						170					175	
Val	Ile	Ser	Val	Gly	Ser	Ser	Leu	Tyr	Pro	Gly	Pro	Gly	Leu	Gly	His
			180					185					190		
Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
	195					200						205			
Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
	210					215					220				
Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
225					230					235				240	
Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
			245						250					255	
Ser	Val	Thr	Pro	Pro	Ser	Leu	Ala	Ala	Thr	Ala	Val	Ser	Phe	Pro	Val

260 265 270
 Pro Ser Met Ala Pro Ile Thr Val His Pro Tyr His Thr Glu Pro Gly
 275 280 285
 Leu Pro Leu Pro Thr Ser Val Ala Cys Glu Leu Trp Gly Gln Gly Thr
 290 295 300
 Val Ser Ser Val His Pro Ala Ser Thr Phe Pro Ala Ile Gln Gly Ala
 305 310 315 320
 Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser Pro Leu Val Ser Gly Gly
 325 330 335
 Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His
 340 345 350
 Ser Leu His His Leu His Ala Ala Tyr Arg Val Gly Met Leu Ala Leu
 355 360 365
 Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser
 370 375 380
 Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala
 385 390 395 400
 Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala
 405 410 415
 Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
 420 425 430
 Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro
 435 440 445
 Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr
 450 455 460
 Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe
 465 470 475 480
 Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
 485 490 495
 Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
 500 505 510
 Gln Thr Lys Glu Leu Trp Gln Arg Val Ser Leu Glu Met Ala Thr Phe
 515 520 525
 Ser Pro
 530

<210> 6129
 <211> 2012
 <212> DNA
 <213> Homo sapiens

<400> 6129
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 120
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 180
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 300
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 360

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420
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540
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<210> 6130

<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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<211> 167

<212> PRT

<213> Homo sapiens

<400> 6132

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<211> 4156

<212> DNA

<213> Homo sapiens

<400> 6133

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<212> PRT

<213> Homo sapiens

<400> 6134

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<211> 2073
<212> DNA
<213> Homo sapiens

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<210> 6138

<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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 gtccctggatc acccagcctc cctgagggtc ctgggtccct caggcttgag gtgcccagcg
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<210> 6144

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6144

Phe	Phe	Phe	Phe	Glu	Leu	Gln	Ser	Thr	Glu	Leu	Tyr	Leu	Gln	Thr
1			5					10					15	
Ser	Thr	Glu	Ser	Leu	Thr	Leu	His	Pro	Arg	Val	Leu	Pro	Leu	Trp
		20					25					30		Asn
Ser	Gly	Ser	Arg	Gln	Ala	Trp	Val	His	Pro	Pro	Ala	Gln	Pro	Arg
	35					40						45		Thr
Ala	Gly	Pro	Glu	Leu	Gly	Gly	Gln	Gly	Ile	Pro	Ser	Pro	Gly	Cys
	50				55					60				Ala
Cys	Gln	Arg	Gly	Glu	Ala	Gly	Gly	Gly	Gly	Asn	Ala	Val	Leu	Pro
65				70				75					80	Gln
Glu	Ser	Val	Leu	Arg	Ala	Ser	Ala	Val	Gly	Arg	Gly	Ala	Glu	Gly
		85						90					95	Pro
Gly	Ala	Leu	Thr	Arg	Ser	Gly	Ser	Gly	Ala	Ala	Ser	Ala	Leu	Val
		100					105						110	Arg
Pro	Gly	Glu	Lys	Gly	Cys	Trp	Cys	Arg	Thr	Ala	Ser	Gly	Ala	Gly
	115					120						125		Pro
Ser	Gly	Asp	Arg	Gly	Pro	Glu	Val	Gln	Val	Pro	Gly	Gly		
	130					135						140		

<210> 6145

<211> 766

<212> DNA

<213> Homo sapiens

<400> 6145

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 120
 cagcagcaag tgaagcagcc ttgtcagcca cccctgtta aatgtcaaga gacatgtgca
 180
 cccaaaacca aggatccatg tgctccccag gtcaagaagc aatgccacc gaaagacacc
 240
 atcattccag cccagcagaa gtgtccctca gccagcaag cctccaagag caaacagaag
 300

taaggatgga ctggatatta ccatcatcca ccatcctggc taccagatgg aaccttctct
360
tcttctctct cctcttccct ccagctcttg agcctaccct cctctcacat ctctctctgc
420
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480
accttggett ctctatatc ccaccccgat gctctccag gtgggtgtga gagagacctc
540
attctctgca ggctccagcg tggccacagc taaggcccat ccatttccca aagtgaggaa
600
agtgtctggg cttcttctgg ggttccaccc tgacaagtag ggtcacagag gctggtgcac
660
agtttctgcc tcattctctt ccatgatgcc ccctgctctg ggcttctctc ctgttttccc
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766

<210> 6146
<211> 100
<212> PRT
<213> Homo sapiens

<400> 6146
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20 25 30
Ala Val Pro Thr Pro Glu Ala Gln Gln Gln Gln Val Lys Gln Pro Cys
35 40 45
Gln Pro Pro Pro Val Lys Cys Gln Glu Thr Cys Ala Pro Lys Thr Lys
50 55 60
Asp Pro Cys Ala Pro Gln Val Lys Lys Gln Cys Pro Pro Lys Asp Thr
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Ser Lys Gln Lys
100

<210> 6147
<211> 1852
<212> DNA
<213> Homo sapiens

<400> 6147
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120
acatagttct ctgtaaaaact gacttacttt ccaaataatat tttgaaataa aacaatataa
180
aaatgttttc tgtttttagg aatggtggaa agcagcagac ataattggag tgggttggat
240
aagcaaagtg atattcaaaa tttaaatgaa gagagaatct tagctttaca gctttgtggg
300

tggataaaga aaggaacgga tgtagacgtg gggccatttt tgaactccct tgtacaagaa
360
ggggaatggg aaagagctgc tgctgtggca ttgttcaact tggatattcg ccgagcaatc
420
caaatcctga atgaaggggc atcttctgaa aaaggagatc tgaatctcaa tgtggtagca
480
atggctttat cgggttatac ggatgagaag aactcccttt ggagagaaat gtgtagcaca
540
ctgcgattac agctaaataa cccgtatttg tgtgtcatgt ttgcatttct gacaagtga
600
acaggatctt acgatggagt tttgtatgaa aacaaagttg cagtacgtga cagagtggca
660
tttgcttgta aattccttag tgatactcag ttaaatagat acatcgaaaa gttgaccaat
720
gaaatgaaag aggctggaaa tttggaagga attttgctta caggccttac taaagatgga
780
gtggacttaa tggagagtta tgttgataga actggagatg ttcaaacagc aagtactgt
840
atgttacagg gttcaccttt agatgttctt aaagatgaaa gggttcagta ctggattgag
900
aattatagaa atttattaga tgcctggagg ttttggcata aacgagctga atttgatatt
960
cacaggagta agttggatcc cagttccaag cctttagcac aagtttttgt gagttgcaat
1020
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1080
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1200
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1260
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1320
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1380
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1560
tcagatcagc agttttgatg tttgagtgat tttgatatgc ttcacagaga caaatgctgc
1620
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1680
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1740
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1852

<210> 6148

<211> 410

<212> PRT

<213> Homo sapiens

<400> 6148

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      20           25           30
Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
      35           40           45
Ser Leu Val Gln Glu Gly Glu Trp Glu Arg Ala Ala Ala Val Ala Leu
      50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
      85           90           95
Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
      100          105          110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
      115          120          125
Phe Leu Thr Ser Glu Thr Gly Ser Tyr Asp Gly Val Leu Tyr Glu Asn
      130          135          140
Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
145          150          155          160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
      165          170          175
Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
      180          185          190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
      195          200          205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
      210          215          220
Asp Glu Arg Val Gln Tyr Trp Ile Glu Asn Tyr Arg Asn Leu Leu Asp
225          230          235          240
Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
      245          250          255
Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
      260          265          270
Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
      275          280          285
Gln Gly Arg Gly Phe Ser Gln Tyr Gly Val Ser Gly Ser Pro Thr Lys
      290          295          300
Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
305          310          315          320
Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
      325          330          335
Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
      340          345          350
Ala Gln Phe Asn Asn Trp Phe Thr Trp Cys His Asn Cys Arg His Gly
      355          360          365
Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
      370          375          380
Pro Val Ser Ala Cys Thr Cys Lys Cys Met Gln Leu Asp Thr Thr Gly

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<210> 6149
<211> 1949
<212> DNA
<213> Homo sapiens
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5332

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 1440
 tcagacacgt cggacgagga ggacgcgagt gtcaccgtgg ggacaggaga gaagctgaga
 1500
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 1560
 cagaaggaaa aaaataaagt gaaaaagaag cgaaagaaag aaacaaaagg cagagaggtt
 1620
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 1680
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 1740
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 1800
 gctctgccgc ccagaagcag aaccccagcc acacagacca gcacaccaag cactggcgga
 1860
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 1920
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 1949

<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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Leu	Ser	Ser	Asp	Met	Val	Glu	Lys	Gln	Thr	Gly	Lys	Lys	Asp	Lys	Asp
			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
		35					40					45			
Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
	50					55					60				
Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
65					70					75					80
Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
				85					90					95	
Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
			100					105					110		
Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
		115					120					125			
Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
	130					135					140				
Val	Cys	Gln	Lys	Gly	Thr	Pro	Asn	Ser	Ala	Ser	Lys	Thr	Lys	Asp	Lys
145					150				155						160
Leu	Asn	Lys	Arg	Asn	Glu	Arg	Gly	Glu	Thr	Arg	Leu	His	Arg	Ala	Ala
			165					170						175	
Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
		180						185					190		
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<210> 6151
<211> 648
<212> DNA
<213> Homo sapiens
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5334

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 360
 tgtcaactgt cccggccagt ggctgcgtgc atgtgtgtgt gaacagggaa aaggccaccc
 420
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 480
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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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Gln	Pro	Cys	Gly	Ser	Pro	Arg	Arg	Thr	Glu	Glu	Thr	Gly	Glu	Thr	Trp
			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Val	Ile
	50					55					60				
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65					70				75					80	
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90					95		
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
		100					105					110			
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
		115				120						125			
Arg	Arg														
	130														

<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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 120
 cacaaggatg ccgtcacctg tgtgaacttc tctccttcgg gacacctgct tgettcgggc
 180
 tcccagagaca agactgtccg catctgggta cccaatgtca aaggtgagtc cactgtgttt
 240

cgtgcacaca cagccacagt gaggagtgtc cacttctgca gtgatggcca gtccttcgtg
300
acagcctctg acgacaagac agtcaaagtg tgggcaactc atcgccagaa attcctgttc
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1380
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1810

<210> 6154
 <211> 388
 <212> PRT
 <213> Homo sapiens

<400> 6154

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			20					25					30		
Ser	Arg	Ala	Tyr	Arg	Phe	Thr	Gly	His	Lys	Asp	Ala	Val	Thr	Cys	Val
			35				40					45			
Asn	Phe	Ser	Pro	Ser	Gly	His	Leu	Leu	Ala	Ser	Gly	Ser	Arg	Asp	Lys
	50					55					60				
Thr	Val	Arg	Ile	Trp	Val	Pro	Asn	Val	Lys	Gly	Glu	Ser	Thr	Val	Phe
65					70					75					80
Arg	Ala	His	Thr	Ala	Thr	Val	Arg	Ser	Val	His	Phe	Cys	Ser	Asp	Gly
				85					90					95	
Gln	Ser	Phe	Val	Thr	Ala	Ser	Asp	Asp	Lys	Thr	Val	Lys	Val	Trp	Ala
			100					105					110		
Thr	His	Arg	Gln	Lys	Phe	Leu	Phe	Ser	Leu	Ser	Gln	His	Ile	Asn	Trp
	115					120					125				
Val	Arg	Cys	Ala	Lys	Phe	Ser	Pro	Asp	Gly	Arg	Leu	Ile	Val	Ser	Ala
	130				135						140				
Ser	Asp	Asp	Lys	Thr	Val	Lys	Leu	Trp	Asp	Lys	Ser	Ser	Arg	Glu	Cys
145					150					155					160
Val	His	Ser	Tyr	Cys	Glu	His	Gly	Gly	Phe	Val	Thr	Tyr	Val	Asp	Phe
				165					170					175	
His	Pro	Ser	Gly	Thr	Cys	Ile	Ala	Ala	Ala	Gly	Met	Asp	Asn	Thr	Val
			180					185					190		
Lys	Val	Trp	Asp	Val	Arg	Thr	His	Arg	Leu	Leu	Gln	His	Tyr	Gln	Leu
	195						200					205			
His	Ser	Ala	Ala	Val	Asn	Gly	Leu	Ser	Phe	His	Pro	Ser	Gly	Asn	Tyr
	210					215					220				
Leu	Ile	Thr	Ala	Ser	Ser	Asp	Ser	Thr	Leu	Lys	Ile	Leu	Asp	Leu	Met
225					230					235					240
Glu	Gly	Arg	Leu	Leu	Tyr	Thr	Leu	His	Gly	His	Gln	Gly	Pro	Ala	Thr
				245						250				255	
Thr	Val	Ala	Phe	Ser	Arg	Thr	Gly	Glu	Tyr	Phe	Ala	Ser	Gly	Gly	Ser
			260					265					270		
Asp	Glu	Gln	Val	Met	Val	Trp	Lys	Ser	Asn	Phe	Asp	Ile	Val	Asp	His
			275				280					285			
Gly	Glu	Val	Thr	Lys	Val	Pro	Arg	Pro	Pro	Ala	Thr	Leu	Ala	Ser	Ser
	290					295					300				
Met	Gly	Asn	Leu	Pro	Glu	Val	Asp	Phe	Pro	Val	Pro	Pro	Gly	Arg	Gly
305					310					315					320
Trp	Ser	Val	Glu	Ser	Val	Gln	Ser	Gln	Pro	Gln	Glu	Pro	Val	Ser	Val
				325					330					335	
Pro	Gln	Thr	Leu	Thr	Ser	Thr	Leu	Glu	His	Ile	Val	Gly	Gln	Leu	Asp
			340					345					350		
Val	Leu	Thr	Gln	Thr	Val	Ser	Ile	Leu	Glu	Gln	Arg	Leu	Thr	Leu	Thr
			355				360					365			
Glu	Asp	Lys	Leu	Lys	Gln	Cys	Leu	Glu	Asn	Gln	Gln	Leu	Ile	Met	Gln

370
Arg Ala Thr Pro
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375

380

<210> 6155
<211> 995
<212> DNA
<213> Homo sapiens

<400> 6155
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120
aataacagcg atttattatt aaggaaatga tacgcttttg tccattcaa ataatgtttt
180
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<210> 6156
<211> 164
<212> PRT
<213> Homo sapiens

<400> 6156
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Leu Gly Asn Glu Leu Glu Pro Leu Ala Glu Asp Ile Leu His Gln Ser					
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Pro Asn Met Asn Ala Val Ile Ser Leu Gln Lys Ile Ile Glu Ile Gln					
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Lys Leu Leu Val Ser Leu Trp Lys Arg Ser Gln Pro Cys Glu Val Pro					
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<210> 6157

<211> 2135

<212> DNA

<213> Homo sapiens

<400> 6157

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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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<211> 4310
<212> DNA
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<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser				480
	485		490	495
Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser				
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Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr				
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Asn Thr Met His Tyr Gly Ser				
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<210> 6161
 <211> 1489
 <212> DNA
 <213> Homo sapiens

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<210> 6162

<211> 58

<212> PRT

<213> Homo sapiens

<400> 6162

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		20					25				30				
Arg	Lys	Gly	Thr	Glu	Pro	Gly	Val	Val	Ala	His	Ala	Cys	Asn	Pro	Xaa
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<210> 6163

<211> 713

<212> DNA

<213> Homo sapiens

<400> 6163

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 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 6164
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 35 40 45
 Ser Asp Gly Tyr Arg Tyr Leu Gly Lys Asp Thr Val Asp Gly Leu Asp
 50 55 60
 Ser Ser Leu Leu Lys Cys Thr Arg Arg Cys Met Arg Gly Phe Arg Leu
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 Pro Glu Lys Gln Pro Ser Lys Thr Arg Val Ser Phe Leu Glu Ser Lys
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 <211> 1004
 <212> DNA
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<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
				85				90					95		
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			100					105					110		
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
		115				120						125			
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
	130					135					140				
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145					150					155					160
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165					170					175		
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
		180					185					190			
Lys	Asn	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn	
	195					200						205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
	210					215						220			
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225

230

235

<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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120
tcaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc tgttctatgt
180
cctccacttc cccagtgcct tctctcctcc cgggtctgcg cggacgcggc ctccttacct
240
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360
ccctgcctac cctccgtctc gccagccgag ctgtggaact agcgcgtgcc ccctcgccga
420
cctcggcgtc tccggtcgc cctcacttg tgggtggggcg cagctcctgg tccctcagct
480
gcgcgcgcc ccacgcggcc gggctgcggg tctagggggg ccgcatctcc ctggctttcc
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aagggttaag gtcgtgatc tagggcggct gggcgccag ggccctcggg ggggtggcgt
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660
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720
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780
gctgtgacct tttcctcatg taaaacgagt agtcttggac gatctgggca taggaaccaa
840
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900
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960
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1020
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1080
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1140
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1200
agccacaaag ggaaggatcc
1220

<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

Ala	Lys	Trp	Gln	Ile	Trp	Thr	Val	Ser	Ile	Asp	Ala	Asp	Glu	Pro	His
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Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
		20					25				30				
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
	35					40				45					
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
	50				55				60						
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
65				70					75					80	
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
				85					90						

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
cttttgaggt gactataact gaagattgct ttacagaagc ccaaaaaggt tttttgagtc
240
atgatgcaag aatctgggac tgagacaaaa agtaacggtt cagccatcca gaatgggtcg
300
ggcggcagca accacttact agagtgcggc ggtcttcggg aggggcggtc caacggagag
360
acgccggccg tggacatcgg ggcagctgac ctgcgccacg cccagcagca gcagcaacag
420
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480
tcaagccctt gggagttgga agtcctgcag gtcccttggt gggagcagtt gctgagacga
540
agatgagtgg acctgtgtgt cagcctaacc cttccccatt ttgaataaaa ttattctttg
600
gagaaatggt tcccactgct ttcattgcaa aataaaaatt aaacgaaaaa cagcttaagc
660
ctgtgaagaa ggaaatactg agctagccag caaaagagag aaagaagagg aggggagagg
720

<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

Met Met Gln Glu Ser Gly Thr Glu Thr Lys Ser Asn Gly Ser Ala Ile

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Gln	Asn	Gly	Ser	Gly	Gly	Ser	Asn	His	Leu	Leu	Glu	Cys	Gly	Gly	Leu
		20						25					30		
Arg	Glu	Gly	Arg	Ser	Asn	Gly	Glu	Thr	Pro	Ala	Val	Asp	Ile	Gly	Ala
		35					40					45			
Ala	Asp	Leu	Ala	His	Ala	Gln	Gln	Gln	Gln	Gln	Gln	Trp	His	Leu	Ile
	50					55				60					
Asn	His	Gln	Pro	Ser	Arg	Ser	Pro	Ser	Ser	Trp	Leu	Lys	Arg	Leu	Ile
65					70					75				80	
Ser	Ser	Pro	Trp	Glu	Leu	Glu	Val	Leu	Gln	Val	Pro	Cys	Gly	Glu	Gln
			85					90						95	
Leu	Leu	Arg	Arg	Arg											
			100												

<210> 6171

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacagag
240
tcagaagcca agtatcttca agaccttctc atggagagtg tgaatttttc ccccgcgaat
300
ctctctagca ctggttccag gtatctgaat gctttgggtg acagtgcggt ggcccttgaa
360
acaaaggata cctcgctagc tagttttatc cctgcagtga atgatttgac ctctgatctc
420
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480
ttaactgcaa cttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg
540
catctgtcta cagaaagggc caaagttgat aatcgtcgtc agaacatgga ctttctaaaa
600
gcaaagtcag aggaattcag atttggaatc aaggctgcag aggagcaact ttcagccaga
660
ggcatggatg cttctctgtc tcatcagtcc ttagtagcac tatcagagaa actggcaaga
720
ttaagcaac agactatacc tttgaagaaa aaattggagt cctattttaga cttaatgccg
780
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900
tttccctaac aaagtaaatt gaataggact ttacagagtt ctttttctc ttggcatttc
960
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggg
1020

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1080

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1130

<210> 6172

<211> 292

<212> PRT

<213> Homo sapiens

<400> 6172

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Pro	Gln	Glu	Glu	Arg	Glu	Thr	Gln	Val	Ala	Ala	Trp	Leu	Lys	Lys	Ile
			20					25					30		
Phe	Gly	Asp	His	Pro	Ile	Pro	Gln	Tyr	Glu	Val	Asn	Pro	Arg	Thr	Thr
		35					40					45			
Glu	Ile	Leu	His	His	Leu	Ser	Glu	Arg	Asn	Arg	Val	Arg	Asp	Arg	Asp
	50					55					60				
Val	Tyr	Leu	Val	Ile	Glu	Asp	Leu	Lys	Gln	Lys	Ala	Ser	Glu	Tyr	Glu
65					70					75				80	
Ser	Glu	Ala	Lys	Tyr	Leu	Gln	Asp	Leu	Leu	Met	Glu	Ser	Val	Asn	Phe
			85					90						95	
Ser	Pro	Ala	Asn	Leu	Ser	Ser	Thr	Gly	Ser	Arg	Tyr	Leu	Asn	Ala	Leu
			100					105					110		
Val	Asp	Ser	Ala	Val	Ala	Leu	Glu	Thr	Lys	Asp	Thr	Ser	Leu	Ala	Ser
	115						120					125			
Phe	Ile	Pro	Ala	Val	Asn	Asp	Leu	Thr	Ser	Asp	Leu	Phe	Arg	Thr	Lys
	130					135					140				
Ser	Lys	Ser	Glu	Glu	Ile	Lys	Ile	Glu	Leu	Glu	Lys	Leu	Glu	Lys	Asn
145					150					155					160
Leu	Thr	Ala	Thr	Leu	Val	Leu	Glu	Lys	Cys	Leu	Gln	Glu	Asp	Val	Lys
			165					170					175		
Lys	Ala	Glu	Leu	His	Leu	Ser	Thr	Glu	Arg	Ala	Lys	Val	Asp	Asn	Arg
		180					185						190		
Arg	Gln	Asn	Met	Asp	Phe	Leu	Lys	Ala	Lys	Ser	Glu	Glu	Phe	Arg	Phe
	195					200						205			
Gly	Ile	Lys	Ala	Ala	Glu	Glu	Gln	Leu	Ser	Ala	Arg	Gly	Met	Asp	Ala
	210					215					220				
Ser	Leu	Ser	His	Gln	Ser	Leu	Val	Ala	Leu	Ser	Glu	Lys	Leu	Ala	Arg
225					230					235				240	
Leu	Lys	Gln	Gln	Thr	Ile	Pro	Leu	Lys	Lys	Lys	Leu	Glu	Ser	Tyr	Leu
			245					250					255		
Asp	Leu	Met	Pro	Asn	Pro	Ser	Leu	Ala	Gln	Val	Lys	Ile	Glu	Glu	Ala
		260					265						270		
Lys	Arg	Glu	Leu	Asp	Ser	Ile	Glu	Ala	Glu	Leu	Thr	Arg	Arg	Val	Asp
	275						280					285			
Met	Met	Glu	Leu												
	290														

<210> 6173

<211> 1483

<212> DNA

<213> Homo sapiens

<400> 6173
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120
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc
180
aaggttttta tcaccaagca gggctatgcc ttgttggttt cagatcttca acagggtgtg
240
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc
300
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420
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480
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600
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660
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720
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780
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900
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960
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1020
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1080
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1140
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1200
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1260
tggactttag gtatataggg caagtcagca agaaagcacc acacactcag gaagccttgt
1320
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1380
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1440
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1483

<210> 6174

<211> 299
 <212> PRT
 <213> Homo sapiens

<400> 6174

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 20          25          30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
 35          40          45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
 50          55          60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
 65          70          75          80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
 85          90          95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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<210> 6175
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 6175

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120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaaggggtgaa
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 acaaatgact ttgagttggt gaagaaccag ctgtagatc cagacataaa gagattgcct
 240
 tggttgaata gaagtcaaac agtagtggaag gagtatttgg cttttcttgg taatcttgta
 300
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<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

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			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro
		35					40					45			
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65					70					75					80
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
				85					90						

<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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 120
 ttctagcttt ctgtctctat gggtagctca gtggagtcac tgggcgaatg ggccatgctg
 180
 tttgccagtg gaggtttcca ggtgaaactc tatgacattg agcaacagca gataaggaac
 240
 gccctggaaa acatcagaaa ggagatgaag ttgctggagc aggcagggtc tctgaaaggc
 300
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 360
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 480
 tgtctcatgc cttccaagtt gtttgctggc ttggtccatg tgaagcaatg catcggtggc
 540
 catcctgtga atccgccata ctacatcccg ctggttgagc tgggtcccca cccggagacg
 600

gccctacga cagtggacag aaccacgcc ctgatgaaga agattgganc agtgcccat
 660
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 720
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 780
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 1080
 aatgcagctt ccactcctct cattggaggc cctatttggg aacactgcaa gcccttaatc
 1140
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 1320
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 1380
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 1440
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 1500
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 1536

<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

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Ser	Gly	Gly	Phe	Gln	Val	Lys	Leu	Tyr	Asp	Ile	Glu	Gln	Gln	Ile	
			20					25					30		
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
			35				40						45		
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
			50			55					60				
Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65					70				75					80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85					90						95	
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
			100					105					110		
Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val

115 120 125
 Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro Tyr Tyr Ile Pro
 130 135 140
 Leu Val Glu Leu Val Pro His Pro Glu Thr Ala Pro Thr Thr Val Asp
 145 150 155 160
 Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser
 165 170 175
 Pro Glu Gly Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn
 180 185 190
 His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu
 195 200 205
 Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala
 210 215 220
 Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu
 225 230 235 240
 Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr
 245 250 255
 Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn
 260 265 270
 Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala
 275 280 285
 Arg Arg Gln Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys
 290 295 300
 Ser Gln Val Gln Pro Gln
 305 310

<210> 6179
 <211> 2940
 <212> DNA
 <213> Homo sapiens

<400> 6179
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 120
 aagccatata ggctgtgaag gtccagtcac tccaaatgaa gagatgcctg gacaaaaaca
 180
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<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
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Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
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Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
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Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
			100					105						110	
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115				120						125			
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
			130			135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
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Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
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5361

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Gln	Leu	Phe	Ile	Glu	Ile	Leu	Asn	Arg	Tyr	Ile	Tyr	Phe	Tyr	Glu	Lys
		675		680		685									
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		690		695		700									
Ile	Arg	Glu	Asp	Leu	Pro	Asn	Leu	Glu	Ser	Ser	Glu	Glu	Thr	Glu	Gln
		705		710		715									
Ile	Asn	Lys	His	Phe	His	Asn	Thr	Leu	Glu	His	Leu	Arg	Leu	Arg	Arg
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 <211> 1135
 <212> DNA
 <213> Homo sapiens

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<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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		20					25					30			
Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
		35				40					45				
Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
50				55						60					
Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
65			70					75						80	
Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
		85						90					95		
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
		100					105						110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115				120						125			
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Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
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			165					170					175		
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
		180				185						190			
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
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<210> 6183

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<212> DNA

<213> Homo sapiens

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<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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	35					40					45				
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	50				55						60				
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
65				70					75					80	
Leu	Gly	Arg	Leu	Val	Lys	Asp	Met	Lys	Ile	Lys	Ser	Leu	Glu	Glu	Ile
			85						90					95	
Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
		100					105						110		
Leu	Gly	Ala	Ser	Leu	Lys	Asp	Glu	Val	Leu	Lys	Ile	Met	Pro	Val	Gln
	115					120					125				
Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
	130				135					140					
Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys

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 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro
 180 185 190
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val
 195 200 205
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val
 210 215 220
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser
 225 230 235 240
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe
 245 250 255
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys
 260 265 270
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<210> 6185
 <211> 1231
 <212> DNA
 <213> Homo sapiens

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 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 6186
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 35 40 45
 Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln
 50 55 60
 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
 65 70 75 80
 Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr
 85 90 95
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<210> 6187
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 <212> DNA
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<210> 6194
 <211> 621
 <212> PRT
 <213> Homo sapiens

<400> 6194
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 35 40 45
 Ala Glu Val Val Gln Tyr Ala Lys Glu Val Val Asp Phe Ser Ser His
 50 55 60
 Tyr Gly Ser Glu Asn Ser Met Ser Tyr Thr Met Trp Asn Leu Ala Gly
 65 70 75 80
 Val Pro Asn Val Phe Pro Ser Ser Gly Asp Phe Thr Gln Thr Ala Val
 85 90 95
 Phe Arg Thr Tyr Gly Thr Trp Trp Asp Gln Cys Pro Ser Ala Ser Leu
 100 105 110
 Pro Phe Lys Arg Thr Pro Pro Asn Phe Gln Ser Gln Asp Tyr Val Glu
 115 120 125
 Leu Thr Phe Glu Gln Gln Val Tyr Pro Thr Ala Val His Val Leu Glu
 130 135 140
 Thr Tyr His Pro Gly Ala Val Ile Arg Ile Leu Ala Cys Ser Ala Asn
 145 150 155 160
 Pro Tyr Ser Pro Asn Pro Pro Ala Glu Val Arg Trp Glu Ile Leu Trp

5379

595 600 605
 Ser Phe Pro Lys Val Phe Ile Lys Lys Ser Phe Thr Gln
 610 615 620

<210> 6195
 <211> 518
 <212> DNA
 <213> Homo sapiens

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<210> 6196
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 6196
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 35 40 45
 Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His
 50 55 60
 Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr
 65 70 75 80
 Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser
 85 90 95
 Phe His Ser His Leu Leu Ser Thr Asn Tyr Ala Lys Asn Tyr Val Gln
 100 105 110
 His Arg Thr Gly Trp
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<210> 6197
 <211> 2841

<212> DNA

<213> Homo sapiens

<400> 6197

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<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

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Ser Ser Gln His His Gly Leu Asn Thr His Trp Ala Pro Thr Leu Gly			
	35	40	45
Pro Gly Trp Gly Met Trp Gly Gln Glu Ala Ala Gln Ser Gly Arg Gln			
	50	55	60
Arg Glu Lys Cys Val Gln Arg Ala Pro Ile Ser Gly Cys Asn Val Val			
65	70	75	80
Leu Arg Leu Trp Leu Gly Ser Ala Ser Arg Val Ser Tyr Val Leu Cys			
	85	90	95
Ser Tyr Phe Leu Ser Pro Thr Leu Pro Cys Arg Asn Pro Ser Glu Tyr			
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Val Ala Thr Ile Leu Glu Leu Ser Ala Leu Ile Val			
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<210> 6199

<211> 1777

<212> DNA

<213> Homo sapiens

<400> 6199

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1777

<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
		35				40					45				
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
	50				55				60						
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
65				70					75					80	
Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
			85					90					95		
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
		100						105					110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
	115					120						125			
Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
	130				135						140				
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Ser Ser Trp Phe

150

155

160

<210> 6201

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6201

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604

<210> 6202

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6202

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35 40 45
Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro
50 55 60
Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His
65 70 75 80
Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg
85 90 95
Gly Gly Ser Gly Glu Gly Glu Pro Ala Glu Glu Arg Pro Gly Arg Ala
100 105 110
Gly Asp His Ala Gly Ala Gln Gly Glu Arg Gln Asp

115

120

<210> 6203
<211> 3462
<212> DNA
<213> Homo sapiens

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<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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His	Leu	Glu	Val	Lys	Ala	Ser	Leu	Met	Asn	Asp	Asp	Phe	Glu	Lys	Ile
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			180					185					190		
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<211> 92

<212> PRT

<213> Homo sapiens

<400> 6206

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			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
			35				40					45			
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			50			55					60				
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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<211> 1384

<212> DNA

<213> Homo sapiens

<400> 6207

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 6208

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			20					25					30		
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		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
		50				55					60				
Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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Trp	Arg	Leu	His	Ser	Pro	Thr	Gln	Val	Glu	Asp	Ala	Met	Leu	Asp	Thr

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 Lys Ser Pro Phe Ser Arg Leu Gly Ser Thr Glu Ala Asp Leu Cys Gln
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 210 215 220
 Ser Gln Gly Gly Pro Thr His Cys Leu His Ser Glu Ala Val Ala Ile
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 Gly Pro Arg Gly Cys Ser Gly Ser Leu Arg Trp Leu Gln Glu Ser Asp
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<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
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Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
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Arg	Gln	Ala	Cys	Val	Trp	Thr	Ser	Ala	Gly	Ala	Ala	Ala	Leu	Arg	Leu
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<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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35 40 45
Ala Phe Glu Gly Ser Tyr Leu Glu Asp Thr Gln Met Tyr Gly Asn Ile
50 55 60
Ile Arg Gly Trp Xaa Ser Val Ser Asp Gln Pro Xaa Lys Asn Ser Asn
65 70 75 80
Ser Lys Asn Asp Arg Arg Asn Arg Lys Phe Lys Glu Ala Glu Arg Leu
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Phe Ser Lys Ser Ser Val Thr Ser Ala Ala Ala Val Ser Ala Leu Ala
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Gly Val Gln Asp Gln Leu Ile Glu Lys Arg Glu Pro Gly Ser Gly Thr
115 120 125
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<211> 101

<212> PRT

<213> Homo sapiens

<400> 6214

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Lys	Gly	Val	Met	Glu	Gly	Gln	Ser	Leu	Glu	Pro	Ala	Ala	Ser	Ser	Gly
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 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala
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<400> 6217

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<211> 133

<212> PRT

<213> Homo sapiens

<400> 6218

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Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln			
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Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr			
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<210> 6219

<211> 2495

<212> DNA

<213> Homo sapiens

<400> 6219

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 <211> 179
 <212> PRT
 <213> Homo sapiens

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 Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser
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 Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser
 65 70 75 80
 Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp
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 Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro
 100 105 110
 Leu Pro Ser Pro Arg Pro Val Cys Trp Asp Gly Ala Ser Thr Leu Arg
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 Leu Val Lys Ala Glu Leu Asn Ser Ser Asn Glu Ser Ala Gly Trp Ala
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<210> 6221
 <211> 1487
 <212> DNA
 <213> Homo sapiens

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<211> 330

<212> PRT

<213> Homo sapiens

<400> 6222

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<211> 944

<212> DNA

<213> Homo sapiens

<400> 6223

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<210> 6224
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 <212> PRT
 <213> Homo sapiens

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 Ala Glu Gly His Val Gly Gln Gly Ala Pro Gly Leu Met Gly Asn Met
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 Asn Pro Glu Gly Gly Val Asn His Glu Asn Gly Met Asn Arg Asp Gly
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 Gly Met Ile Pro Glu Gly Gly Gly Gly Asn Gln Glu Pro Arg Gln Gln
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 Pro Gln Pro Pro Pro Glu Glu Pro Ala Gln Ala Ala Met Glu Gly Pro
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 Gln Pro Glu Asn Met Gln Pro Arg Thr Arg Arg Thr Lys Phe Thr Leu
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 Leu Gln Val Glu Glu Leu Glu Ser Val Phe Arg His Thr Gln Tyr Pro
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<210> 6225
 <211> 3851
 <212> DNA
 <213> Homo sapiens

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<210> 6226

<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
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Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
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Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
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Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
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<400> 6227
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<210> 6228
 <211> 271
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 <213> Homo sapiens

<400> 6228
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 35 40 45
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
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<211> 944

<212> PRT

<213> Homo sapiens

<400> 6230

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Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
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Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
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Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu	Leu
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Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
			85					90						95	
Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
			100					105					110		
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
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Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
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 245 250 255
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 260 265 270
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 275 280 285
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 340 345 350
 Glu Cys Val Gln Ile Leu Phe Asn Ser Arg Tyr Ala Glu Ala Leu Gly
 355 360 365
 Leu Gly Asn Met Val Pro Val Pro Tyr Arg Lys Ile Ala Cys Asp Pro
 370 375 380
 Glu Ala Val Glu Ile Val Gly Ile Pro Asp Lys Ile Pro Phe Lys Arg
 385 390 395 400
 Pro Cys Thr Tyr Gly Val Pro Lys Leu Lys Arg Ile Leu Glu Glu Arg
 405 410 415
 His Ser Ile His Phe Ile Ile Lys Arg Met Phe Asp Glu Arg Ile Phe
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 Thr Gly Asn Lys Phe Thr Lys Asp Thr Thr Lys Leu Glu Pro Ala Ser
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 450 455 460
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 465 470 475 480
 Gly Pro Gly Thr Ser Gly Glu Leu Gly Gly Leu Arg Pro Ile Lys Ile
 485 490 495
 Glu Pro Glu Asp Leu Asp Ile Ile Gln Val Thr Val Pro Asp Pro Ser
 500 505 510
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 515 520 525
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 530 535 540
 Glu Asp Ala Arg Pro Glu Glu Arg Pro Val Glu Asp Ser His Gly Asp
 545 550 555 560
 Val Ile Arg Pro Leu Arg Lys Gln Val Glu Leu Leu Phe Asn Thr Arg
 565 570 575
 Tyr Ala Lys Ala Ile Gly Ile Ser Glu Pro Val Lys Val Pro Tyr Ser
 580 585 590
 Lys Phe Leu Met His Pro Glu Glu Leu Phe Val Val Gly Leu Pro Glu

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Phe	Gln	Glu	Asn	Tyr	Asp	Ala	Arg	Leu	Ser	Arg	Ile	Asp	Ile	Ala	Asn
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Phe	Arg	Lys	Pro	Cys	Thr	Phe	Gly	Ser	Gln	Asn	Leu	Glu	Arg	Ile	Leu
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Val	Ile	Leu	Arg	Glu	Gln	Val	Lys	Glu	Leu	Phe	Asn	Glu	Lys	Tyr	Gly
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Glu	Ala	Leu	Gly	Leu	Asn	Arg	Pro	Val	Leu	Val	Pro	Tyr	Lys	Leu	Ile
			805						810					815	
Arg	Asp	Ser	Pro	Asp	Ala	Val	Glu	Val	Thr	Gly	Leu	Pro	Asp	Asp	Ile
			820					825					830		
Pro	Phe	Arg	Asn	Pro	Asn	Thr	Tyr	Asp	Ile	His	Arg	Leu	Glu	Lys	Ile
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Leu	Lys	Ala	Arg	Glu	His	Val	Arg	Met	Val	Ile	Ile	Asn	Gln	Leu	Gln
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Pro	Phe	Ala	Glu	Ile	Cys	Asn	Asp	Ala	Lys	Val	Pro	Ala	Lys	Asp	Ser
865					870					875					880
Ser	Ile	Pro	Lys	Arg	Lys	Arg	Lys	Arg	Val	Ser	Glu	Gly	Asn	Ser	Val
			885						890					895	
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Pro	Asp
			900					905					910		
Val	Ala	Ser	Ala	Asn	Gln	Ile	Ser	Leu	Val	Gln	Trp	Pro	Met	Tyr	Met
		915					920					925			
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<210> 6231

<211> 471

<212> DNA

<213> Homo sapiens

<400> 6231

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120

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 360
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<210> 6232
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 6232
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 35 40 45
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 50 55 60
 Trp Asn Gly Thr Thr Pro Arg Gly Glu Pro Pro Asn His Ser Ser
 65 70 75 80
 Lys Lys Gly Thr Lys Lys Trp Ala Leu Asp Phe Ser Thr Pro Glu Thr
 85 90 95
 Gln Phe Pro Pro Pro Gly Arg Pro Phe Leu Gly Ile Pro Thr Trp Asp
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<210> 6233
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<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
	50				55					60					
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
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Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
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Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
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	130					135					140				
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Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
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Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
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Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
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Pro Asp Leu Pro Leu Asp
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215

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<210> 6235
<211> 3427
<212> DNA
<213> Homo sapiens

<400> 6235

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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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 35 40 45
 Lys Ala Thr Gly Ser Pro Val Ser Ile Phe Val Tyr Asp Val Lys Pro
 50 55 60
 Gly Ala Glu Glu Gln Thr Gln Val Ala Lys Ala Ala Phe Lys Arg Phe
 65 70 75 80
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 85 90 95
 Thr Glu Lys Cys Leu His Val Val Thr Glu Ala Val Thr Pro Leu Gly
 100 105 110
 Ile Tyr Leu Lys Ala Arg Val Glu Ala Gly Gly Leu Lys Glu Leu Glu
 115 120 125
 Ile Ser Trp Gly Leu His Gln Ile Val Lys Ala Leu Ser Phe Leu Val
 130 135 140
 Asn Asp Cys Ser Leu Ile His Asn Asn Val Cys Met Ala Ala Val Phe
 145 150 155 160
 Val Asp Arg Ala Gly Glu Trp Lys Leu Gly Gly Leu Asp Tyr Met Tyr
 165 170 175
 Ser Ala Gln Gly Asn Gly Gly Gly Pro Pro Arg Lys Gly Ile Pro Glu
 180 185 190
 Leu Glu Gln Tyr Asp Pro Pro Glu Leu Ala Asp Ser Ser Gly Arg Val
 195 200 205
 Val Arg Glu Lys Trp Ser Ala Asp Met Trp Arg Leu Gly Cys Leu Ile
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 Trp Glu Val Phe Asn Gly Pro Leu Pro Arg Ala Ala Leu Arg Asn

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Cys	Arg	Ala	Pro	Gly	Gly	Phe	Met	Ser	Asn	Arg	Phe	Val	Glu	Thr	Asn
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Leu	Phe	Leu	Glu	Glu	Ile	Gln	Ile	Lys	Glu	Pro	Ala	Glu	Lys	Gln	Lys
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Phe	Phe	Gln	Glu	Leu	Ser	Lys	Ser	Leu	Asp	Ala	Phe	Pro	Glu	Asp	Phe
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Cys	Arg	His	Lys	Val	Leu	Pro	Gln	Leu	Leu	Thr	Ala	Phe	Glu	Phe	Gly
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Asn	Ala	Gly	Ala	Val	Val	Leu	Thr	Pro	Leu	Phe	Lys	Val	Gly	Lys	Phe
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Leu	Ser	Ala	Glu	Glu	Tyr	Gln	Gln	Lys	Ile	Ile	Pro	Val	Val	Val	Lys
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Met	Phe	Ser	Ser	Thr	Asp	Arg	Ala	Met	Arg	Ile	Arg	Leu	Leu	Gln	Gln
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Ile	Phe	Pro	His	Val	Val	His	Gly	Phe	Leu	Asp	Thr	Asn	Pro	Ala	Ile
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Arg	Glu	Gln	Thr	Val	Lys	Ser	Met	Leu	Leu	Leu	Ala	Pro	Lys	Leu	Asn
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Glu	Ala	Asn	Leu	Asn	Val	Glu	Leu	Met	Lys	His	Phe	Ala	Arg	Leu	Gln
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Ala	Lys	Asp	Glu	Gln	Gly	Pro	Ile	Arg	Cys	Asn	Thr	Thr	Val	Cys	Leu
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Gly	Lys	Ile	Gly	Ser	Tyr	Leu	Ser	Ala	Ser	Thr	Arg	His	Arg	Val	Leu
465					470					475					480
Thr	Ser	Ala	Phe	Ser	Arg	Ala	Thr	Arg	Asp	Pro	Phe	Ala	Pro	Ser	Arg
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Phe	Leu	Ser	Lys	Leu	Glu	Ser	Val	Ser	Glu	Asp	Pro	Thr	Gln	Leu	Glu
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Glu	Val	Glu	Lys	Asp	Val	His	Ala	Ala	Ser	Ser	Pro	Gly	Met	Gly	Gly
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Ala	Ala	Ala	Ser	Trp	Ala	Gly	Trp	Ala	Val	Thr	Gly	Val	Ser	Ser	Leu
			580					585					590		
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 690 695 700
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 Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro Arg Pro Asp Ser Trp Gly
 755 760 765
 Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp Ser Arg Gln Val Lys Ala
 770 775 780
 Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg Arg Arg Glu Met Glu Ala
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<210> 6237
 <211> 494
 <212> DNA
 <213> Homo sapiens

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<210> 6238
 <211> 141
 <212> PRT
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<400> 6238
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Ser	Thr	Pro	Lys	Asn	Gly	Met	Ser	Ser	Lys	Ser	Arg	Lys	Arg	Ile	Met		
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Pro	Asp	Pro	Val	Thr	Glu	Pro	Pro	Val	Thr	Asp	Pro	Val	Tyr	Glu	Ala		
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Leu	Leu	Tyr	Cys	Asn	Ile	Pro	Ser	Val	Ala	Glu	Arg	Ser	Met	Glu	Gly		
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His	Ala	Pro	His	His	Phe	Lys	Leu	Val	Ser	Val	His	Val	Phe	Ile	Arg		
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His	Gly	Asp	Arg	Tyr	Pro	Leu	Tyr	Val	Ile	Pro	Lys	Thr	Lys	Arg	Pro		
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Glu	Ile	Asp	Cys	Thr	Leu	Val	Ala	Asn	Arg	Lys	Pro	Tyr	His	Pro	Lys		
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<210> 6239

<211> 911

<212> DNA

<213> Homo sapiens

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Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
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Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
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Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
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Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
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Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
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<212> PRT

<213> Homo sapiens

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5433

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 Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro
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 Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala
 1125 1130 1135
 Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu
 1140 1145 1150
 Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu
 1155 1160 1165
 His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly
 1170 1175 1180
 Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro
 1185 1190 1195 1200
 Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His
 1205 1210 1215
 Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly
 1220 1225 1230
 Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg
 1235 1240 1245
 Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg
 1250 1255 1260
 Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val
 1265 1270 1275 1280
 Trp Asp Gln Ser Ser Val
 1285

<210> 6247
 <211> 497
 <212> DNA
 <213> Homo sapiens

<400> 6247
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 120
 aaggctgcat gggggctcctt gcccgggagg cgccccacct agagaaacag ccggcagccg
 180
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 240
 caacccatgt ctatcggtat cacagaggcg agtcgaagct gcacatgtgc ttggacatag
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 360

tatcagagca tgctccagag gcatcccagc ctgtgagtag ggaactgctt acgcactggg
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 497

<210> 6248

<211> 142

<212> PRT

<213> Homo sapiens

<400> 6248

Met	Gly	Trp	Thr	Asp	Val	Pro	Cys	Ser	Val	His	Lys	Ala	Gly	Ser	Arg
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Ser	Ala	Gly	Glu	Gly	Gln	Glu	Glu	Gly	Gly	Gly	Leu	Ala	Cys	Pro	Gly
			20					25					30		
Ala	Ser	Gln	Arg	Leu	His	Gly	Gly	Pro	Cys	Pro	Gly	Gly	Ala	Pro	Pro
		35					40					45			
Arg	Glu	Thr	Ala	Gly	Ser	Arg	Pro	Ala	Ala	Arg	Ser	Pro	Gly	Arg	Glu
	50					55					60				
Ile	Leu	Phe	Ile	Cys	Ala	Arg	Gly	Arg	Arg	Gly	Asn	Pro	Cys	Leu	Ser
65				70					75					80	
Leu	Ser	Gln	Arg	Arg	Val	Glu	Ala	Ala	His	Val	Leu	Gly	His	Arg	Glu
			85						90				95		
Trp	Ser	Glu	Lys	Arg	Gln	Lys	Lys	Asp	Ile	Pro	Trp	Ser	Trp	Arg	Gln
		100						105					110		
Leu	Ser	Asn	Ile	Arg	Ala	Cys	Ser	Arg	Gly	Ile	Pro	Ala	Cys	Glu	Tyr
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Gly	Thr	Ala	Tyr	Ala	Leu	Gly	Phe	Thr	Thr	Val	Ala	Thr	Pro		
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<210> 6249

<211> 1217

<212> DNA

<213> Homo sapiens

<400> 6249

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 120
 tgaactgcag gtgggaattt ctgagaaggt ttccttctta aatagaaaga ttaaaccaca
 180
 ggttccatta tgggtcgact tgatgggaaa gtcacatcc tgacggccgc tgctcagggg
 240
 attggccaag cagctgcctt agcttttgca agagaaggtg ccaaagtcac agccacagac
 300
 attaattgagt ccaaacttca ggaactggaa aagtaccggt gtattcaaac tcgtgtcctt
 360
 gatgtcacia agaagaaaca aattgatcag ttgccaatg aagttgagag acttgatggt
 420
 ctctttaatg ttgctgggtt tgtccatcat ggaactgtcc tggattgtga ggagaaagac
 480

tgggacttct cgatgaatct caatgtgctc agcatgtacc tgatgatcaa ggcattcctt
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 cctaaaatgc ttgtcagaa atctggcaat attatcaaca tgtcttctgt ggcttccagc
 600
 gtcaaaggag ttgtgaacag atgtgtgtac agcacaacca aggcagccgt gattggcctc
 660
 acaaaatctg tggctgcaga tttcatccag cagggcatca ggtgcaactg tgtgtgcca
 720
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 780
 gcacggaatg atttcttgaa gagacaaaag acgggaagat tcgcaactgc agaagaaata
 840
 gccatgctct gcgtgtatct ggcttctgat gaatctgctt atgtaactgg taaccctgtc
 900
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 960
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 1020
 taatcacatg ttaatgaaaa taagctcttt ttaatgatgt cactgtttgc aagagtctga
 1080
 ttctttaagt atattaatct ctttgaatc tcttctgaaa tcattgtaaa gaaataaaaa
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 1200
 aaaaaaaaaa aaaaaaa
 1217

<210> 6250
 <211> 245
 <212> PRT
 <213> Homo sapiens

<400> 6250
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 20 25 30
 Val Ile Ala Thr Asp Ile Asn Glu Ser Lys Leu Gln Glu Leu Glu Lys
 35 40 45
 Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln
 50 55 60
 Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn
 65 70 75 80
 Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys
 85 90 95
 Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met
 100 105 110
 Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn Ile
 115 120 125
 Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn Arg
 130 135 140
 Cys Val Tyr Ser Thr Thr Lys Ala Ala Val Ile Gly Leu Thr Lys Ser
 145 150 155 160
 Val Ala Ala Asp Phe Ile Gln Gln Gly Ile Arg Cys Asn Cys Val Cys

<400> 6251					
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120					
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180					
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240					
ccttggaagg	gcccagtcctg	tctgacaggg	ctttgcagac	ccggcggcta	ttgctttgaa
300					
aaggaggaga	aagaccacgc	acgggcagca	gcctggaggg	acccggtggg	ctgctgagag
360					
ggggctccgc	tgcgacgggc	cctggcccg	cttcaggccc	tcacaggagg	acagtcaagg
420					
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480					
tatagaaaag	agggcatccc	ccagccccac	agcacaagac	cctggccctc	agcgtggac
540					
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600					
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660					
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720					
gaaactgagg	cacaaggagg	tttggaact	tgcccaaggt	cactcacagt	gagtcagctt
780					
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840					
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900					
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960					
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1020					
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1080					

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<210> 6252

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

Met	Gly	Gly	Arg	Pro	Leu	Gly	Lys	Gly	Leu	Cys	Leu	Ala	Ser	Gly	Arg
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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
			20					25					30		
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
			35				40					45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
			50			55					60				
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65					70				75					80	
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
				85				90						95	
Pro	Thr	Ile	Pro												
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<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 120
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 180
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 240

aatatccctg aaggatctca tcagtatgaa ctcttaaaac atgcagaagc aactctagga
300
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360
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420
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480
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540
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660
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780
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960
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1080
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1200
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1260
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1320
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1440
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1800
tatgttttta ttgtctcttg agccttagtt aagagtagtg tagaaatgca tgaacttcac
1860

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1920

aaaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa
1953

<210> 6254
<211> 216
<212> PRT
<213> Homo sapiens

<400> 6254
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20 25 30
Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro
35 40 45
Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe
50 55 60
Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr
65 70 75 80
Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His
85 90 95
Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro
100 105 110
Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp
115 120 125
Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe
130 135 140
Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala
145 150 155 160
His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu
165 170 175
Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu
180 185 190
Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile
195 200 205
Glu Lys Leu Gly Ser Lys Asp Arg
210 215

<210> 6255
<211> 622
<212> DNA
<213> Homo sapiens

<400> 6255
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120
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180
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240

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 360
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 420
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 622

<210> 6256
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 6256
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 Lys Lys Lys Ala Thr Val Ala Ala Phe Thr Ala Ser Glu Gly His Ala
 20 25 30
 His Pro Arg Val Val Glu Leu Pro Lys Thr Asp Glu Gly Leu Gly Phe
 35 40 45
 Asn Ile Met Gly Gly Lys Glu Gln Asn Ser Pro Ile Tyr Ile Ser Arg
 50 55 60
 Val Ile Pro Gly Gly Val Ala Asp Arg His Gly Gly Leu Lys Arg Gly
 65 70 75 80
 Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu Gly Glu Gln His
 85 90 95
 Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Gln Gly Ser Val Lys Leu
 100 105 110
 Val Val Arg Tyr Thr Pro Arg Val Leu Glu Glu Met Glu Ala Arg Phe
 115 120 125
 Glu Lys Met Arg Ser Ala Arg Arg Gln Gln His Gln Ser Tyr Ser
 130 135 140
 Ser Leu Glu Ser Arg Gly
 145 150

<210> 6257
 <211> 2216
 <212> DNA
 <213> Homo sapiens

<400> 6257
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 180

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240
gcactgtcca ccagcactca gagctccatt atgtcccag ctgggggtgc agggtagggg
300
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960
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1260
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1320
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1380
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1440
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1500
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1560
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1680
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1800

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 1860
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 1980
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<210> 6258

<211> 340

<212> PRT

<213> Homo sapiens

<400> 6258

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Phe	Gln	Ala	Leu	Gln	Arg	Leu	His	Met	Thr	Ile	Phe	Ser	Gln	Ser	Val
			20					25					30		
Ser	Pro	Cys	Gly	Lys	Phe	Leu	Ala	Ala	Gly	Asn	Asn	Tyr	Gly	Gln	Ile
		35					40					45			
Ala	Ile	Phe	Ser	Leu	Ser	Ser	Ala	Leu	Ser	Ser	Glu	Ala	Lys	Glu	Glu
	50					55					60				
Ser	Lys	Lys	Pro	Val	Val	Thr	Phe	Gln	Ala	His	Asp	Gly	Pro	Val	Tyr
				70						75				80	
Ser	Met	Val	Ser	Thr	Asp	Arg	His	Leu	Leu	Ser	Ala	Gly	Asp	Gly	Glu
				85					90					95	
Val	Lys	Ala	Trp	Leu	Trp	Ala	Glu	Met	Leu	Lys	Lys	Gly	Cys	Lys	Glu
			100					105					110		
Leu	Trp	Arg	Arg	Gln	Pro	Pro	Tyr	Arg	Thr	Ser	Leu	Glu	Val	Pro	Glu
		115					120					125			
Ile	Asn	Ala	Leu	Leu	Leu	Val	Pro	Lys	Glu	Asn	Ser	Leu	Ile	Leu	Ala
	130					135					140				
Gly	Gly	Asp	Cys	Gln	Leu	His	Thr	Met	Asp	Leu	Glu	Thr	Gly	Thr	Phe
	145					150				155				160	
Thr	Arg	Val	Leu	Arg	Gly	His	Thr	Asp	Tyr	Ile	His	Cys	Leu	Ala	Leu
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<212> DNA

<213> Homo sapiens

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<212> PRT

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			20					25					30				
Ser	Pro	Asp	Asp	Lys	Glu	Phe	Gln	Ser	Val	Glu	Glu	Glu	Met	Gln	Ser		
		35					40					45					
Thr	Val	Arg	Glu	His	Arg	Asp	Gly	Gly	His	Ala	Gly	Gly	Ile	Phe	Asn		
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Arg	Tyr	Asn	Ile	Leu	Lys	Ile	Gln	Lys	Val	Cys	Asn	Lys	Lys	Leu	Trp		
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Glu	Arg	Tyr	Thr	His	Arg	Arg	Lys	Glu	Val	Ser	Glu	Glu	Asn	His	Asn		
			85					90					95				
His	Ala	Asn	Glu	Arg	Met	Leu	Phe	His	Gly	Ser	Pro	Phe	Val	Asn	Ala		
		100						105					110				
Ile	Ile	His	Lys	Gly	Phe	Asp	Glu	Arg	His	Ala	Tyr	Ile	Gly	Gly	Met		
		115					120					125					
Phe	Gly	Ala	Gly	Ile	Tyr	Phe	Ala	Glu	Asn	Ser	Ser	Lys	Ser	Asn	Gln		
	130					135					140						
Tyr	Val	Tyr	Gly	Ile	Gly	Gly	Gly	Thr	Gly	Cys	Pro	Val	His	Lys	Asp		
145					150					155				160			
Arg	Ser	Cys	Tyr	Ile	Cys	His	Arg	Gln	Leu	Leu	Phe	Cys	Arg	Val	Thr		
			165					170					175				
Leu	Gly	Lys	Ser	Phe	Leu	Gln	Phe	Ser	Ala	Met	Lys	Met	Ala	His	Ser		
			180					185					190				
Pro	Pro	Gly	His	His	Ser	Val	Thr	Gly	Arg	Pro	Ser	Val	Asn	Gly	Leu		
		195					200					205					
Ala	Leu	Ala	Glu	Tyr	Val	Ile	Tyr	Arg	Gly	Glu	Gln	Ala	Tyr	Pro	Glu		
	210					215					220						
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<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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120

gatgagcett tcctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag
180

atccatgacg aggaggtcct gcggtgctc tatgaggagg ccaagggcaa cgtgctggct
240

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328

<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

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 35 40 45
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys
 50 55 60
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln
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<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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 180
 aagaagctgg tggaagagaa agctgcccac gccaaaacca aggtcctcct ggccaaggaa
 240
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 420
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 480
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<210> 6270

<211> 307
 <212> PRT
 <213> Homo sapiens

<400> 6270

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          20           25           30
Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
          35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
          50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
65           70           75           80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
          85           90           95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
          100          105          110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
          115          120          125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
          130          135          140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
145          150          155          160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
          165          170          175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
          180          185          190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
          195          200          205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
          210          215          220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
225          230          235          240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
          245          250          255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
          260          265          270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
          275          280          285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
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Leu Val Asn
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<210> 6271
 <211> 1437
 <212> DNA
 <213> Homo sapiens

<400> 6271

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240
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300
aacagcaata ttgtgcatct tttctcagct ggctctgcag cttttatcac aaattcetta
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720
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<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

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      20           25           30
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      35           40           45
Thr Val Tyr Tyr Pro Gln Val His Leu Gly Thr Ile Ser Gly Ala Gly
      50           55           60
Met Val Arg Pro Thr Ser Val Thr Pro Gly Leu Phe Gln Val Leu Lys
      65           70           75           80
Ala Val Tyr Phe Ala Cys Tyr Ser Lys Ala Lys Glu Gln Phe Asn Gly
      85           90           95
Ile Phe Val Pro Asn Ser Asn Ile Val His Leu Phe Ser Ala Gly Ser
      100          105          110
Ala Ala Phe Ile Thr Asn Ser Leu Met Asn Pro Ile Trp Met Val Lys
      115          120          125
Thr Arg Met Gln Leu Glu Gln Lys Val Arg Gly Ser Lys Gln Met Asn
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Thr Leu Gln Cys Ala Arg Tyr Val Tyr Gln Thr Glu Gly Ile Arg Gly
      145          150          155          160
Phe Tyr Arg Gly Leu Thr Ala Ser Tyr Ala Gly Ile Ser Glu Thr Ile
      165          170          175
Ile Cys Phe Ala Ile Tyr Glu Ser Leu Lys Lys Tyr Leu Lys Glu Ala
      180          185          190
Pro Leu Ala Ser Ser Ala Asn Gly Thr Glu Lys Asn Ser Thr Ser Phe
      195          200          205
Phe Gly Leu Met Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys
      210          215          220
Ile Ala Tyr Pro His Glu Val Ile Arg Thr Arg Leu Arg Glu Glu Gly
      225          230          235          240
Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu
      245          250          255
Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg
      260          265          270
Gln Ile Pro Asn Thr Ala Ile Val Leu Ser Thr Tyr Glu Leu Ile Val
      275          280          285
Tyr Leu Leu Glu Asp Arg Thr Gln
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<210> 6273

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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300

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420
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<210> 6274
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 6274
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 35 40 45
 Gln Ala Gln His Phe Ser Leu Leu Tyr Lys Thr Val Gln Arg Leu Leu
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<210> 6275
 <211> 1534
 <212> DNA
 <213> Homo sapiens

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<210> 6276

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6276

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		20						25					30		
Asp	Asp	Leu	Ser	Asn	Ala	Ala	Arg	Glu	Leu	Arg	Val	Leu	Ile	Asp	Asp
		35					40					45			
Ser	Gln	Ser	Ile	Ile	Phe	Ile	Asn	Leu	Asp	Ser	His	Arg	Asn	Val	Met
	50					55					60				
Ile	Arg	Leu	Asn	Leu	Gln	Leu	Thr	Met	Gly	Thr	Phe	Ser	Leu	Ser	Leu

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Phe	Gly	Leu	Met	Gly	Val	Ala	Phe	Gly	Met	Asn	Leu	Glu	Ser	Ser	Leu
				85					90					95	
Glu	Glu	Asp	His	Arg	Ile	Phe	Trp	Leu	Ile	Thr	Gly	Ile	Met	Phe	Met
			100					105					110		
Gly	Ser	Gly	Leu	Ile	Trp	Arg	Arg	Leu	Leu	Ser	Phe	Leu	Gly	Arg	Gln
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Leu	Glu	Ala	Pro	Leu	Pro	Pro	Met	Met	Ala	Ser	Leu	Pro	Lys	Lys	Thr
	130					135				140					
Leu	Leu	Ala	Asp	Arg	Ser	Met	Glu	Leu	Lys	Asn	Ser	Leu	Arg	Leu	Asp
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<210> 6277

<211> 1206

<212> DNA

<213> Homo sapiens

<400> 6277

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<210> 6278

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6278

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<212> DNA

<213> Homo sapiens

<400> 6279

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<213> Homo sapiens

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Asn	Glu	Arg	Pro	Ser	Ala	Gly	Ser	Lys	Ala	Asn	Lys	Glu	Phe	Gly	Asp				
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Ser	Leu	Ser	Leu	Glu	Ile	Leu	Gln	Ile	Ile	Lys	Glu	Ser	Gln	Gln	Gln				
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His	Gly	Leu	Arg	His	Gly	Asp	Phe	Gln	Arg	Tyr	Arg	Gly	Tyr	Cys	Ser				
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 <212> DNA
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<213> Homo sapiens

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Glu	Lys	Lys	Gln	Met	Val	Ala	Asn	Val	Glu	Lys	Gln	Leu	Glu	Glu	Ala
		35					40					45			
Lys	Glu	Leu	Leu	Glu	Gln	Met	Asp	Leu	Glu	Val	Arg	Glu	Ile	Pro	Pro
		50				55					60				
Gln	Ser	Arg	Gly	Met	Tyr	Ser	Asn	Arg	Met	Arg	Ser	Tyr	Lys	Gln	Glu
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<212> DNA

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<400> 6283

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<211> 122

<212> PRT

<213> Homo sapiens

<400> 6284

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<210> 6285

<211> 2542

<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

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<400> 6288

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Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
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Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
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Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val
          100          105          110
Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
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Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
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Asp Ser Phe Val Asn Lys Leu Asp Pro Ser Lys Val Phe Lys Ser Lys
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<400> 6289

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<212> PRT

<213> Homo sapiens

<400> 6290

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<213> Homo sapiens

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<400> 6294
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 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys
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 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser
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 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala
 115 120 125
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln
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 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly
 145 150 155 160
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr
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 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly
 180 185 190
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val
 195 200 205
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val
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<210> 6295
 <211> 2091
 <212> DNA
 <213> Homo sapiens

<400> 6295
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<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala
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Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg
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Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys
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Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val
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Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro
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Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro
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Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe	
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Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val
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Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg
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Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro
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Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val
		260						265					270		
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys
		275					280					285			
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu
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His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr

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 <210> 6299
 <211> 1466
 <212> DNA
 <213> Homo sapiens

 <400> 6299
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<210> 6300
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 <212> PRT
 <213> Homo sapiens

<400> 6300
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 35 40 45
 Arg Glu Ser Leu Val Leu Tyr His Trp Thr Gln Ser Phe Ser Ser Gln
 50 55 60
 Lys Val Arg Leu Val Ile Ala Glu Lys Gly Leu Val Cys Glu Glu Arg
 65 70 75 80
 Asp Val Ser Leu Pro Gln Ser Glu His Lys Glu Pro Trp Phe Met Arg
 85 90 95
 Leu Asn Leu Gly Glu Glu Val Pro Val Ile Ile His Arg Asp Asn Ile
 100 105 110
 Ile Ser Asp Tyr Asp Gln Ile Ile Asp Tyr Val Glu Arg Thr Phe Thr
 115 120 125
 Gly Glu His Val Val Ala Leu Met Pro Glu Val Gly Ser Leu Gln His
 130 135 140
 Ala Arg Val Leu Gln Tyr Arg Glu Leu Leu Asp Ala Leu Pro Met Asp
 145 150 155 160
 Ala Tyr Thr His Gly Cys Ile Leu His Pro Glu Leu Thr Thr Asp Ser
 165 170 175
 Met Ile Pro Lys Tyr Ala Thr Ala Glu Ile Arg Arg His Leu Ala Asn
 180 185 190
 Ala Thr Thr Asp Leu Met Lys Leu Asp His Glu Glu Glu Pro Gln Leu
 195 200 205
 Ser Glu Pro Tyr Leu Ser Lys Gln Lys Lys Leu Met Ala Lys Ile Leu
 210 215 220
 Glu His Asp Asp Val Ser Tyr Leu Lys Lys Ile Leu Gly Glu Leu Ala
 225 230 235 240
 Met Val Leu Asp Gln Ile Glu Ala Glu Leu Glu Lys Arg Lys Leu Glu
 245 250 255
 Asn Glu Gly Gln Lys Cys Glu Leu Trp Leu Cys Gly Cys Ala Phe Thr
 260 265 270
 Leu Ala Asp Val Leu Leu Gly Ala Thr Leu His Arg Leu Lys Phe Leu
 275 280 285
 Gly Leu Ser Lys Lys Tyr Trp Glu Asp Gly Ser Arg Pro Asn Leu Gln

290		295		300
Ser Phe Phe Glu Arg Val Gln Arg Arg Phe Ala Phe Arg Lys Val Leu				
305		310		315
Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
	325		330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
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Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys				
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Lys Lys Tyr Ile				
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<210> 6301

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6301

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<210> 6302

<211> 202

<212> PRT

<213> Homo sapiens

<400> 6302

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 50 55 60
 Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
 65 70 75 80
 Phe Arg Ser Ser Thr Pro Thr Gly Ser Glu Tyr Asp Glu Glu Glu Val
 85 90 95
 Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
 100 105 110
 Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
 115 120 125
 Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
 130 135 140
 Asn Val Asn Gly Ile Lys Tyr His Ala Lys Asn Gly His Arg Thr Gln
 145 150 155 160
 Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
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<210> 6303

<211> 676

<212> DNA

<213> Homo sapiens

<400> 6303

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<210> 6304
<211> 181
<212> PRT
<213> Homo sapiens

<400> 6304
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35 40 45
Asp Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg
50 55 60
Leu Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg
65 70 75 80
Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp
85 90 95
Cys Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala
100 105 110
Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln
115 120 125
Gln Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser
130 135 140
Asp Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala
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<210> 6305
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<212> DNA
<213> Homo sapiens

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<210> 6306

<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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 Cys Lys Asp Lys Ser Val Arg Ile Ile Asp Pro Arg Arg Gly Thr Leu
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	325	330
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	340	345
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	355	360
Glu Ala Ala Leu Glu Ala Glu Glu Trp Phe Glu Gly Lys Asn Ala Asp		365
	370	375
Pro Ile Leu Ile Ser Leu Lys His Gly Tyr Ile Pro Gly Lys Asn Arg		380
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Asp Leu Lys Val Val Lys Lys Asn Ile Leu Asp Ser Lys Pro Thr Ala		400
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<210> 6307

<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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<210> 6308

<211> 483

<212> PRT

<213> Homo sapiens

<400> 6308

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Phe Ile Gln Arg Phe Glu Met Lys Arg Ser Pro Glu Glu Lys Gln Glu
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Met Thr His Ile Cys Lys Glu Gln Thr Val Gln Tyr Ile Leu Thr Met
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100          105          110
Asp Tyr Ala Arg Cys Ser Lys Asn Thr Ala Trp Pro Tyr Phe Leu Pro
115          120          125
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130          135          140
Ile Ala Lys Leu Ala Ala Trp Gly Lys Glu Leu Met Glu Gly Ser Asp
145          150          155          160
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165          170          175
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180          185          190
Asp Ser Ser Gln Tyr Val Gln Cys Val Ala Gly Cys Leu Gln Leu Met
195          200          205
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225          230          235          240
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245          250          255
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275          280          285
Phe Arg Asn Phe Leu Glu Lys Ser Thr Glu Arg Glu Thr Arg Gln Glu
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325          330          335
Phe Leu Leu Glu Lys Leu Gly Glu Ser Val Gln Asp Leu Ser Ser Phe
340          345          350
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355          360          365
Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
370          375          380
Glu Lys Asn Tyr Glu Leu Leu Lys Ile Leu Thr Lys Leu Leu Glu Val
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Ser Asp Asp Pro Gln Val Leu Ala Val Ala Ala His Asp Val Gly Glu

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<210> 6309
 <211> 564
 <212> DNA
 <213> Homo sapiens

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<210> 6310
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 6310
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 35 40 45
 Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala
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<210> 6311
<211> 1548
<212> DNA
<213> Homo sapiens

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<210> 6312

<211> 234

<212> PRT

<213> Homo sapiens

<400> 6312

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His	Leu	Gln	Thr	Asn	Lys	Cys	Leu	Val	Ala	Gln	Gly	Arg	Pro	Ser	Gln
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Gln	Ile	Trp	Ile	Tyr	Asn	Glu	Glu	His	Glu	Leu	Val	Leu	Asn	Ser	Leu
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Leu	Cys	Leu	Asp	Met	Ser	Glu	Thr	Arg	Ser	Ser	Asp	Pro	Pro	Arg	Leu
			165					170						175	
Met	Lys	Cys	His	Gly	Ser	Gly	Gly	Ser	Gln	Gln	Trp	Thr	Phe	Gly	Lys
		180					185						190		
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		195				200					205				
Asp	Pro	Leu	Gly	Gln	Lys	Gly	Ser	Val	Ala	Met	Ala	Ile	Cys	Asp	Gly
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<210> 6313

<211> 725

<212> DNA

<213> Homo sapiens

<400> 6313

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<210> 6314

<211> 175

<212> PRT

<213> Homo sapiens

<400> 6314

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His	Pro	Ser	Thr	Asn	Ser	Leu	Leu	Arg	Glu	Gln	Ile	Ser	Leu	Tyr	Pro
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Glu	Val	Lys	Gly	Glu	Ile	Ala	Arg	Lys	Asp	Glu	Lys	Leu	Leu	Ser	Phe
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Leu	Lys	Asp	Val	Tyr	Val	Asp	Ser	Lys	Asp	Pro	Val	Ser	Ser	Leu	Gln
65					70					75					80
Val	Lys	Ala	Ala	Glu	Thr	Cys	Gln	Glu	Pro	Lys	Glu	Phe	Arg	Leu	Pro
				85					90					95	
Lys	Asp	His	His	Phe	Asp	Met	Ile	Asn	Ile	Lys	Ser	Ile	Pro	Lys	Gly
			100					105					110		
Lys	Ile	Ser	Ile	Val	Glu	Ala	Leu	Thr	Leu	Leu	Asn	Asn	His	Lys	Leu
		115						120					125		
Phe	Pro	Glu	Thr	Trp	Thr	Ala	Glu	Lys	Ile	Met	Gln	Glu	Tyr	Gln	Leu
	130					135					140				
Glu	Gln	Lys	Asp	Val	Asn	Ser	Leu	Leu	Lys	Tyr	Phe	Val	Thr	Phe	Glu
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Val	Glu	Ile	Phe	Pro	Pro	Glu	Asp	Lys	Lys	Ala	Ile	Arg	Ser	Lys	
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<210> 6315
 <211> 378
 <212> DNA
 <213> Homo sapiens

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<210> 6316
 <211> 126
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu His Glu Ala Val Val
 50 55 60
 Gln Pro Ile Gln Gln Ile Leu Glu Ile Val Leu Asp Ala Ser Tyr Lys
 65 70 75 80
 Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu Thr Pro Leu Thr Leu
 85 90 95
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 Gly Val Trp Pro Asn Thr Lys Asn Asp Lys Gly Glu Thr Pro
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<210> 6317
 <211> 1201
 <212> DNA
 <213> Homo sapiens

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What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least 10 contiguous nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject an antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.

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15/11, 15/62, A01K 67/027, A61K 38/00

Richard, A. [US/US]; 191 Leete Street, West Haven,
CT 06516 (US). LEACH, Martin [GB/US]; 884 School
Street, Webster, MA 01570 (US).

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(74) Agent: ELRIFI, Ivor, R.; Mintz, Levin, Cohn, Ferris,
Glovsky and Popeo, P.C., One Financial Center, Boston,
MA 02111 (US).

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Published:

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- Before the expiration of the time limit for amending the
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(71) Applicant (for all designated States except US): CURA-
GEN CORPORATION [US/US]; 555 Long Wharf Drive,
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(72) Inventors; and

(75) Inventors/Applicants (for US only): SHIMKETS,

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: NUCLEIC ACIDS INCLUDING OPEN READING FRAMES ENCODING POLYPEPTIDES; "ORFX"

(57) Abstract: The present invention provides open reading frames encoding isolated polypeptides, as well as polynucleotides en-
coding ORFX and antibodies that immunospecifically bind to ORFX or any derivative, variant, mutant, or fragment of the ORFX
polypeptides, polynucleotides or antibodies. The invention additionally provides methods in which the ORFX polypeptide, polynu-
cleotide and antibody are used in detection and treatment of a broad range of pathological states, as well as to other uses.

WO 00/58473 A3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/08621

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/47 C07K16/18 G01N33/566 C12Q1/68
C12N15/11 C12N15/62 A01K67/027 A61K38/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K G01N A01K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EMBASE, MEDLINE, CAB Data, PAJ, EPO-Internal, WPI Data, STRAND

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	COLE S.T.: "Deciphering the biology of Mycobacterium tuberculosis from the complete genome sequence." NATURE, vol. 393, 11 June 1998 (1998-06-11), XP002144873 sequence	
A	--- LAMERDIN J.E.: "Sequence analysis of a 3.5 Mb contig in human 19p13.3 containing a serine protease gene cluster." EMEST DATABASE ENTRY, 8 February 1999 (1999-02-08), XP002144874 sequence --- -/--	

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

21 August 2000

Date of mailing of the international search report

23.11.00

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European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hix, R

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/08621

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>M.D. ADAMS ET AL.: "The genome sequence of <i>Drosophila melanogaster</i>." SCIENCE, vol. 287, 24 March 2000 (2000-03-24), pages 2185-2195, XP002144875 the whole document -----</p>	6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 00/08621

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 27 to 32 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

claims 1 to 32 partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.